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THE AMERICAN

School Board Journal

of School Ad.

CONSUMER CONFIDENCE

Not so many months ago, when the onrush of the depression was seen in the vast losses of the stock market, the seemingly endless drop in commodity prices, the mounting number of bank failures, and the heart-breaking increase of unemployment, the American people entered a period of economic paralysis.

Now that the turn has come, we realize more and more how the absolute loss of confidence during the past year carried all business to an unreasonable point of deflation. With a certain amount of humility and self-pity we realize that we have not seen the truth, but have been like the old lady who said: "Isn't it a pity that these hard times had to come right in this depression?"

We are passing through this same experience in the school world. Public demand, based upon wide-spread inability to meet the tax burden, has made us face the facts of our school expenditures and extravagance alike. The clamor for reductions in public expenditures and particularly salaries, has swept all local governmental bodies, and the schools have been an especial storm center. The curtailment of school revenue is forcing us to face the facts, but out of the present difficulties will come a better school situation.

In the past three decades, school administration has grown steadily more efficient, as the increased demands for more education have grown. Never in the history of the country have the schools had more competent management, nor have the school boards and the professional executives been more intent upon getting the utmost educational value out of every dollar spent. The present difficulties point to three important attitudes:

1. We must be ready for new adjustments in sources and amounts of school revenue.
2. School budgets must be based upon 1933 school problems and conditions—not conditions of the last decade, nor the uncertainties of the future.
3. The schoolman must look to the seller of school merchandise for marketing programs and business policies that will hold the school buyers' confidence during these days of trial.

Yes, indeed, "Consumer Confidence" on the part of the school buyer is as necessary in selling schools as in all other American trade. More and more our great industries are recognizing the value of well-earned prestige and of trade names that stand for unquestioned quality and service. Note how steadily many firms have carried forward in these days of uncertainty now passing.

In the last three decades, there has grown up in the United States a "regular school trade." This trade is represented by numerous firms who, through careful management, have developed products of true educational value and service. During these hard days, the "regular school trade" has been carrying on in a commendable effort to give the schools good service. The advertising pages of this paper are a splendid expression of the confidence of the school trade in the market, its own products, and the schoolmen themselves.

The support of the "regular school trade" by the school boards and professional schoolmen is a true means of improving the schools as a distinctly American institution. For years the American school textbook, the American school desk, and dozens of American school equipment items have been the admiration of the school world because of their quality, price, and inherent educational value.

Have we appreciated them?

Are we loyal to the genius that has made them?

Are we conscious of a "regular American school trade?"

Frank Bruce
Publisher.

YES, OUR BLACKBOARDS are *Genuine* *Natural* *Slate*



They're so easy to write on

I imagine that is why the leading schools and colleges have them.

Ask any teacher why she likes a genuine Pyramid Natural Slate Blackboard. She'll tell you it's because of their even, black velvet surface so easy to write on . . . And they stay that way, too, because they are solid natural rock. They absorb strong rays instead of reflecting them. They can't peel or crack because the writing surface goes all the way through. Of course, you can wash them, keeping them fresh and clean.

• Have you reserved your copy of the new illustrated book, "Visual Instruction"? You will want this book for your personal use.



NATURAL SLATE BLACKBOARD COMPANY
ROBINSON AVENUE ♦ PEN ARGYL, PA.



Here is the 1933 SHOWER HEAD

It costs less, uses half the water, can't get out of order

NOW CRANE CO. offers schools one of the year's most important plumbing advancements . . . the Refreshor shower head.

This shower head is smaller and better looking than other types. It costs less to purchase . . . less to install. It operates on approximately half the water other kinds require. It never clogs, and it can be cleaned without tools.

These outstanding features were gained for it by substituting machined grooves for old fashioned perforations. The two individual, non-intersecting streams that result, give the same spread at six feet with three and one-half gallons per minute as ordinary shower heads give at six feet with five to seven gallons per minute.

The Refreshor never clogs because it has no perforations to stop-up. To clean it, the thumb-lugs on the face are turned until the head opens; then pipe scale and foreign matter can be flushed out.

Your plumbing contractor can show you this new shower head which makes such outstanding contributions to efficiency and economy in school plumbing.

CRANE

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO
NEW YORK OFFICES: 23 W. 44TH STREET

Branches and Sales Offices in One Hundred and Sixty Cities



Onliwon Sanitary Washroom Service

YOU BE THE JUDGE

A. P. W. Onliwon Paper Towels offer you the best value that you get today for your money. Absolutely safe, absorbent and double-folded. A. P. W. Onliwon is the kind of towel that youngsters will prefer. Pleasant to use and economical, too. One Onliwon Towel does the work of several ordinary paper towels. Make your own comparison of A. P. W. Onliwon Towels with any other towel manufactured today.

A. P. W. ONLIWON TOWELS

are packed 125 towels per package, 30 packages or 3,750 towels per case. The towels are available in two sizes—11 $\frac{1}{4}$ " x 14 $\frac{3}{4}$ " and 9" x 14 $\frac{3}{4}$ ".

A. P. W. ONLIWON TOWELS

are served from sanitary, dust-proof cabinets which economically dispense one towel at a time. These cabinets are available in a large variety of finishes.

Buy A. P. W. Onliwon Towels along with the companion service, A. P. W. Onliwon Toilet Tissue, for all your school washrooms.

Pioneers for Cleanliness Since 1877

A. P. W.

TRADE-MARK REGISTERED IN U. S. PATENT OFFICE

ASBJ-10-82

FREE: Samples of A. P. W. Onliwon Towels and Tissue. Simply clip, fill in and mail this coupon to A. P. W. Paper Co., Albany, N. Y.

Name.....Address.....

City.....State.....

Logically

THE JOHNSON SYSTEM IS THE ONE CORRECT HEAT AND HUMIDITY CONTROL

The Johnson System is complete in every fundamental detail of control. It is thorough in principle, design, construction and operation. Johnson Thermostats and Johnson Humidostats are dependable and accurate . . . and of service permanence. And the Johnson System applies to every form, system and plan of heating and ventilating . . . installed to the individual specifications of the building's requirements. Being the thoroughly complete and totally dependable system of heat and humidity control, Johnson is logically the one correct heat and humidity control.

JOHNSON SERVICE COMPANY

Since 1885

Main Office and Factory

Milwaukee, Wisconsin



The Johnson installation in this school building consists of 41 room thermostats, 41 duct thermostats, 41 double dampers. The building is heated with warm air furnaces. The room thermostats function to control the room temperature . . . the duct thermostats, located in each supply duct, function to prevent the temperature of the incoming air from falling below the room temperature at any time.

Normal School, Richmond, Virginia
Charles M. Robinson, Architect

JOHNSON

Albany
Atlanta
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Buffalo
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Cincinnati
Cleveland
Dallas
Denver
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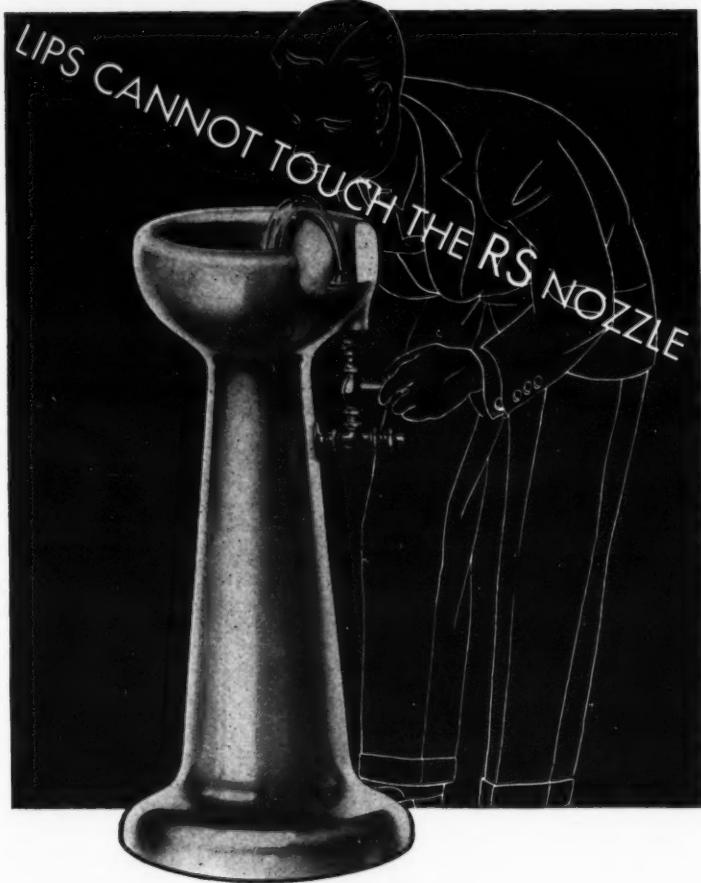
Seattle
Calgary, Alta.
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HEAT AND HUMIDITY CONTROL

30 Johnson Branches Insure Convenient, Quick Service Anywhere, Any Time. Each Johnson Installation Made By Johnson Mechanics Only. Every Johnson Installation Given Annual Inspection.

The All-Metal System, The All-Perfect Graduated Control of Valves And Damper. The Dual Thermostat (Two Temperature or Night And Day) Control, Fuel Saving 25 to 40 per cent.

STOP GERM-SPREADING



Many vital improvements have been made in drinking methods, but, heading the list, is the R-S Vertico-Slant Sanitary Fountain...an advantage which stops germ-spreading.

This fountain never feels the touch of contaminated mouth and lips. It prevents them from even coming close to the jet that spouts the water.

The Vertico-Slant with the water passing angularly from jet to mouth makes each drink a safe and sanitary one. Write for bulletin.

RUNDLE-SPENCE MFG. CO.
444 NO. FOURTH ST. MILWAUKEE, WISCONSIN

RUNDLE-SPENCE



PREVENTS *infection* PROTECTS *health*

Only Evergreen Toilet Tissues and Towels are made by a new and exclusive process which impregnates their fibres with *boric acid*. Gentle, soothing and healing, this time-tried, safe antiseptic means *health* and *safety* to all who use your lavatory facilities . . . and it costs you no more.



HOBERG PAPER & FIBRE CO.
Manufacturers
GREEN BAY, WISCONSIN



the surety
to safety.



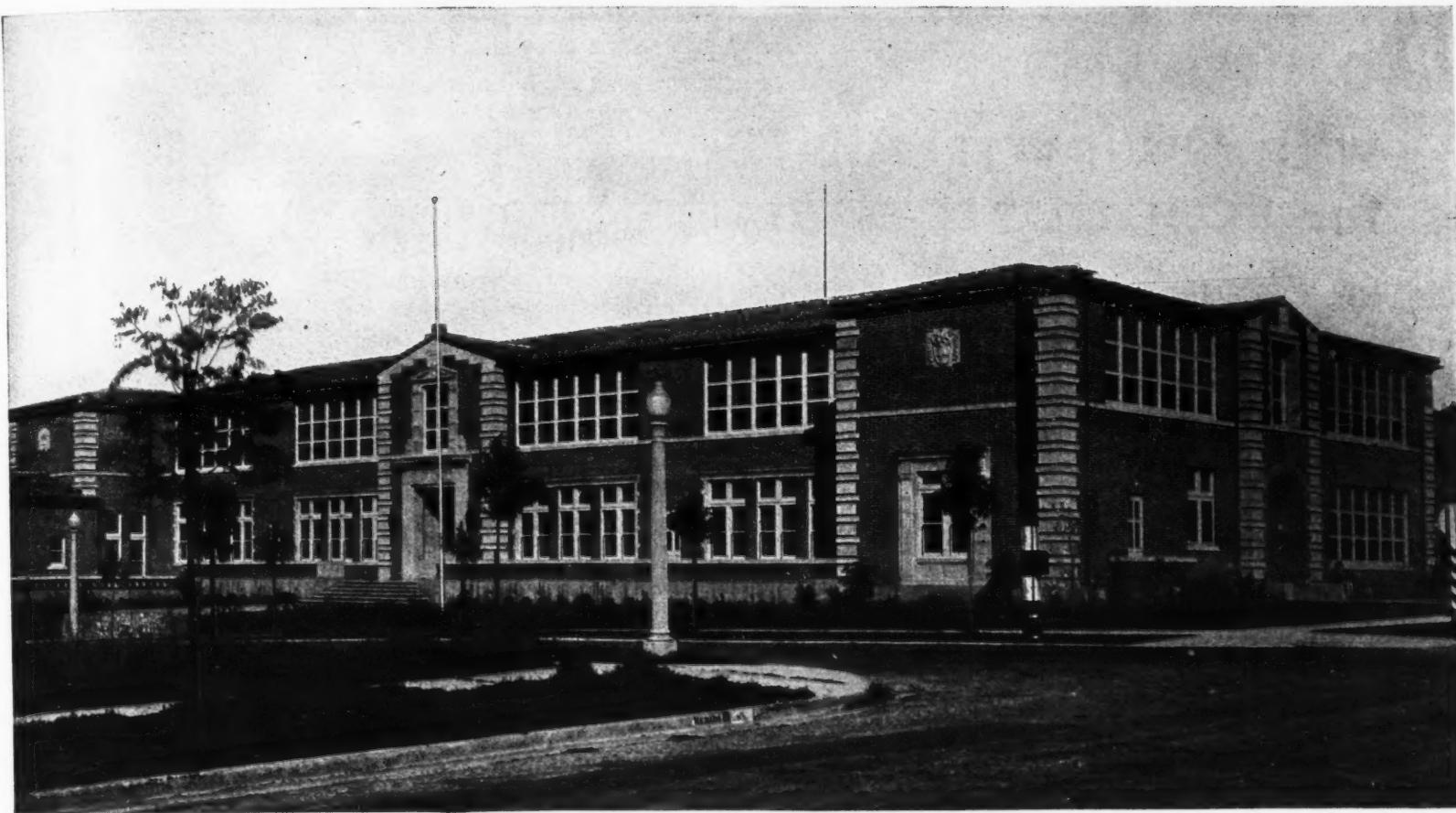
FROM 16% to 50% more surface covered per gallon of paint. An amazing ease of flow that cuts time and labor costs. A handsome finish . . . dirt and dust resistant . . . easy to wash . . . it substantially reduces maintenance and repainting expense. This, in a few words, is the economy story of the **NEW BARRELED SUNLIGHT FLAT WALL FINISH**.

Before you repaint, investigate the initial and long-run savings made possible by this sensational new flat finish. Write to U. S. Gutta Percha Paint Company, 44-J Dudley Street, Providence, R. I. (Branches or distributors in all principal cities.)

Barreled Sunlight FLAT WALL FINISH

Reg. U. S. Pat. Off.

EQUIPPED THROUGHOUT WITH SLOAN FLUSH VALVES



The EMERY PARK SCHOOL, Alhambra, Cal.

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PLUMBING FIXTURES

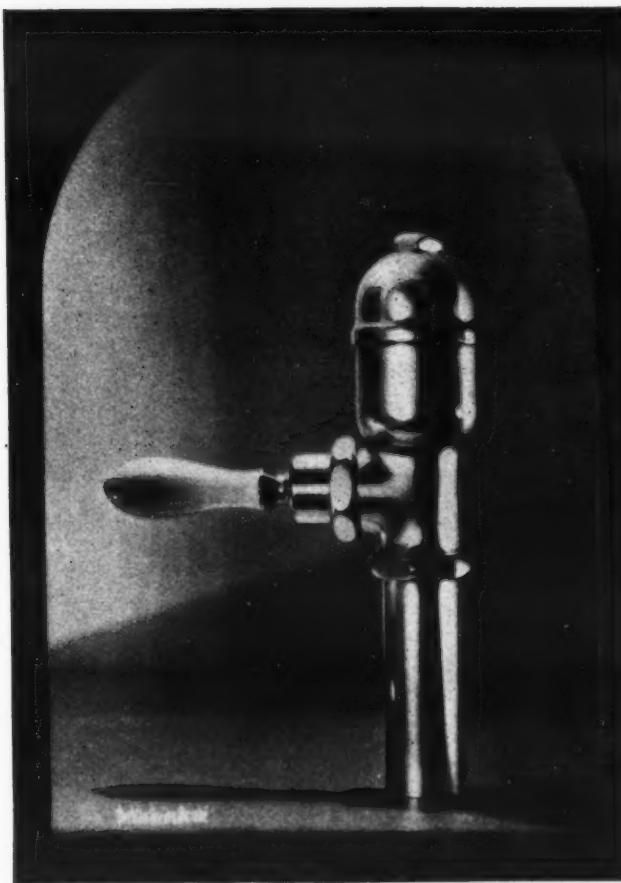
Standard Sanitary Mfg. Co.
Los Angeles, Cal.

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THE STAR FLUSH VALVE

A complete line of SLOAN hand-operated or automatic seat-operated flush valves, either exposed or concealed, provides for every school requirement or type of fixture—including floor or wall outlet closets, urinals and slop sinks. In addition, valves with a measured flush are available for showers and lavatories.

Sloan offices in all principal cities are at your disposal without obligation, to offer the benefit of our experience with school flushing equipment. Call our nearest branch or write to 4300 W. Lake Street, Chicago, Ill.

SLOAN VALVE CO • CHICAGO

L. SONNEBORN SONS, Inc.
GUARANTEED PRODUCTS

DON'T GAMBLE
with Ordinary PAINT
for SCHOOL FLOORS!

**Use a special cushion treatment which
outlasts all others and saves labor and
money for your school...**

SONNEBORN'S CEMENT FILLER and DUSTPROOFER is a special cement filler and dustproofer. It is composed of tough, resilient gums and varnish oils that penetrate the pores of a floor, binding fine particles of cement and sand together, so that they resist the friction of traffic.

It is a simple, inexpensive job. One man, working with a long-handled brush, can cover 4,000 square feet of floor in a day. In twelve hours the surface will be dry—and the dust nuisance ended.

You may retain the concrete color of the floor by using Sonneborn's Cement Filler and Dustproofer in the transparent finish. Or, if you wish to work out a special decorative scheme, you can have it in a wide variety of colors.

Remember, you can't expect ordinary wall paint to act as a cushion between your floors and traffic. You need this special treatment.

Hundreds of schools have proved it best.

Let us tell you about schools that have used this floor treatment with great success. Write today for our maintenance booklet.

Full specifications will be found in Sweet's Catalog, page A 354.

Note these famous Sonneborn savers of school buildings and maintenance expense. The coupon below will bring you detailed information

LAPIDOLITH

—A chemical liquid hardener for preserving and dustproofing concrete floors.

LIGNOPHOL

—For finishing, preserving and wear-proofing wood floors.

HYDROCIDE COLORLESS

—For waterproofing exterior of exposed walls.

CEMENT FILLER AND DUST PROOFER

—A decorative and dustproofing treatment.

CEMCOAT EXTERIOR AND INTERIOR PAINTS

—Tough, durable paints that produce an attractive finish. Various colors.

MAG-I-SAN CLEANING POWDER

—For economy and thoroughness in cleaning floors, walls, general utility.

AMALIE WAX

(*Liquid and Paste*)

—Durable and dependable wax for every purpose. A Sonneborn guaranteed quality product.

L. SONNEBORN SONS, Inc.
88 LEXINGTON AVENUE • NEW YORK

Mail
Coupon for
Information

L. SONNEBORN SONS, INC. ASBJ-10
88 Lexington Avenue, New York
Please send me, without obligation, demonstration samples and literature on: Lapidolith____; Lignophol____; Cement Filler and Dustproofer____; Cemcoat Exterior and Interior Paints____; Hydrocide Colorless____; Mag-I-San____; Amalie Wax____;
(Check products that interest you.)
Name_____
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Buy From The Manufacturers
THAT SUPPLY THE U. S. NAVY, ARMY, COAST
GUARD, DEPTS. OF JUSTICE, COMMERCE,
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SAMSON

Sound Distributing Systems
For supplying programs originating
from Radio, Phonograph or
Microphone



**THE JUNIOR
SCHOOL SYSTEM**

Choice of 25-room or 50-room equipment—radio set power amplifier, microphone (amplified) electric phonograph, pick-up and control board—all enclosed within cabinet and including speakers, tubes, etc.

So simple a child can operate it.

Maximum of service—minimum price. Write for details of this unit in our Bulletin BJ104.

Originators of A-C Operated Sound Systems

Samson Electric Co.

MANUFACTURERS SINCE 1892



Factories:
Canton and Watertown, Mass.

**FENCING
SCHOOL PROPERTY**



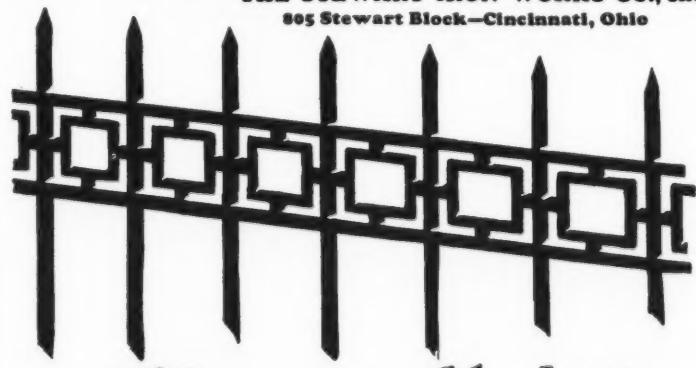
"Young America" is deserving of the protecting influence afforded by a Stewart Iron or Chain Link Wire Fence.

Youngsters in the excitement of play can not, and should not be expected to remember the limits of imaginary safety areas. These "zones" of safety should be definitely defined by a fool-proof "life preserving barrier" — a Stewart Fence.

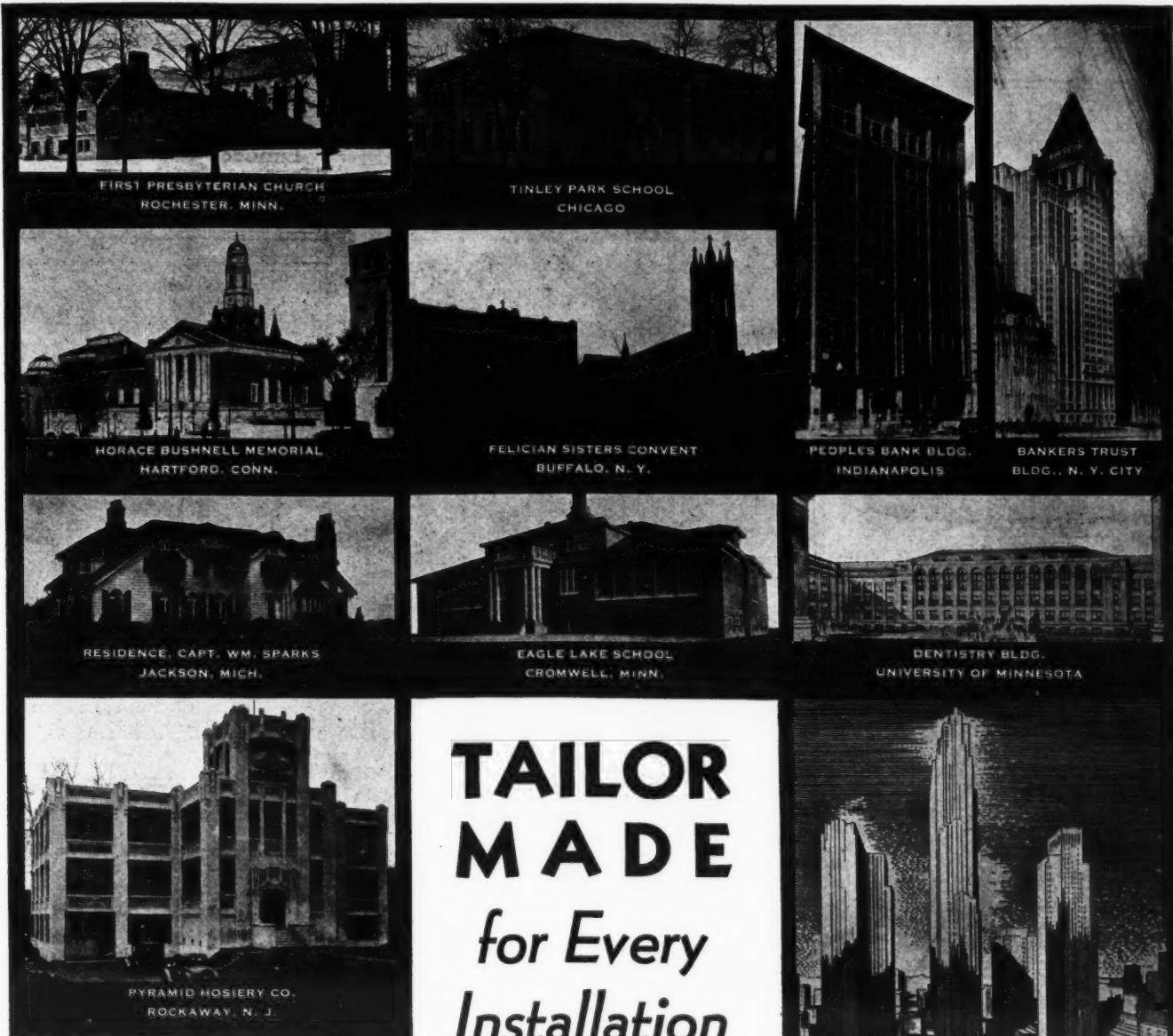
This effective method of curbing schoolground fatalities is so reasonable in cost that its importance cannot be overestimated.

Why not look into this matter of Fencing NOW?—Your request for information will have our prompt attention.

THE STEWART IRON WORKS CO., Inc.
805 Stewart Block—Cincinnati, Ohio



Stewart IRON
and
WIRE
FENCES



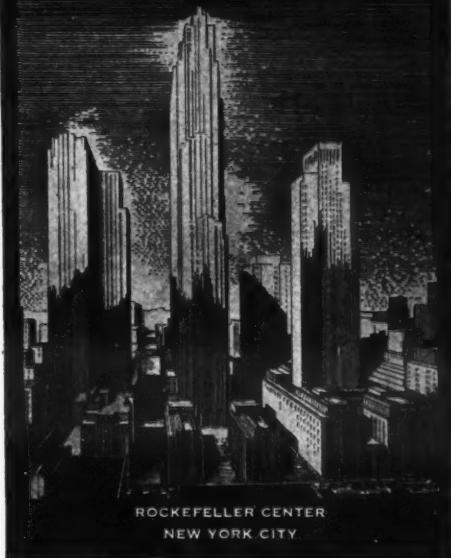
TAILOR MADE for Every Installation

FLEXIBILITY... The Minneapolis-Honeywell Modutrol System supplies correct temperature precisely as demanded by the individual requirements of any building... old or new... large or small

EVERY BUILDING, because it is different from every other building, has its individual temperature control requirements. The Minneapolis-Honeywell Modutrol System, the most flexible system of temperature control ever developed, readily meets the varying demands of every individual problem. The right control in the right place, possible only with the Modutrol

System, insures accurate temperature, maximum efficiency and the greatest saving in fuel. No matter what the temperature control requirements are, the Modutrol System is tailor made to fit. Minneapolis-Honeywell Regulator Company, Executive Office, 2830 Fourth Avenue South, Minneapolis, Minnesota. Factories: Minneapolis, also Elkhart and Wabash, Indiana.

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Perfect Temperature control for any type or size building



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I make a Specialty of Designing School Buildings in
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They represent the perfected outcome of 22
years of Air Diffusing experience. Some of
their points of superiority are: Rugged cast
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See that Nu-Notch is used in your next theatre, school or church
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OUR booklet, "Facts You
Should Know About Resilient Floors
for Schools," gives information that
will enable you to buy intelligently.
Write for it. **Congoleum-Nairn Inc.,**
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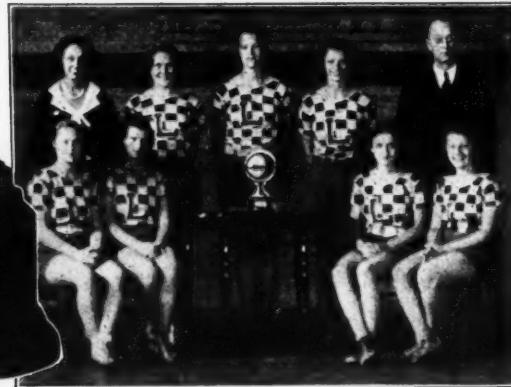


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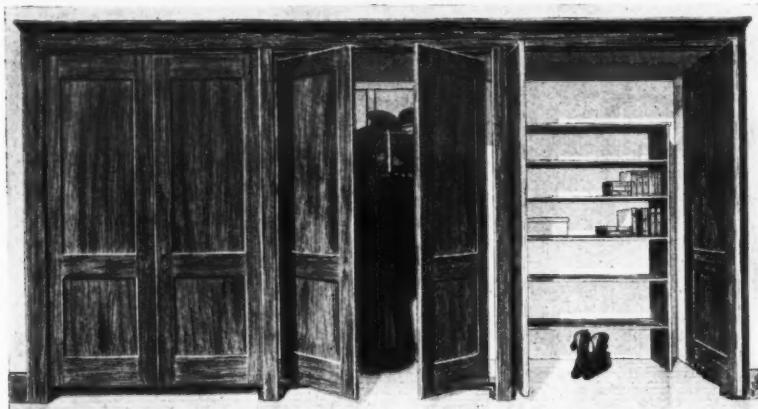
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GENERAL OFFICES—KANSAS CITY, MO.

BLOX-ON-END
FLOORING



Comes in 8 ft. Built-up
Lengths—The end-grain UP.

Small blocks of Yellow Pine
dovetailed onto baseboards.



EVANS
"Vanishing Door"
WARDROBE

Class X

equipped with either "Jamb" type (as illustrated) or "Floor" type hinges. This is Class P wardrobe if made with flush doors.

CLASSROOM WARDROBES
High in Quality — Low in Cost

Made to set in a recess flush with the wall. Plaster back, ends and ceiling. No partitions, but with mullions between pairs of doors. Blackboards if required. Five-shelf bookcase instead of clothing equipment at no extra charge when desired.

The "Vanishing Door" hinges on which the doors are hung are made with double pivoted arms and swing the doors back into the wardrobe entirely out of the way. Simple—trouble-proof—and last as long as the building. Wardrobes are furnished complete in the knockdown, with all woodwork cut to size, and only need to be nailed in place. The hinges are easier to put on than common butt hinges. The entire cost of installation is small.

We make many other types of school wardrobes, fully illustrated and described in Catalog "L." Send for your copy.

W. L. EVANS
WASHINGTON, INDIANA, U. S. A.

**Let your Students "Play Safe" on
ROBINS HYGIENIC GYM MATS**

**The Seven
Advanced Features
of the
Robins Mat**

1. WASHABLE
2. DUST PROOF
3. SANITARY
4. RESILIENT
5. DURABLE
6. REASONABLY PRICED
7. GUARANTEED

There's less chance of harm in the gymnasium and more economy if Robins Mats are in use. Made of a special processed sponge rubber and rubberized duck covering. Robins Mats can be repeatedly washed, preventing the accumulation of dust and disease germs. The health of the students is kept unimpaired.

Injuries, burns or skin abrasions are a thing of the past, as there is no tufting or quilting. Robins Mats are 300% more resilient than canvas mats; cannot be completely compressed.

Already installed in numerous schools and colleges throughout the United States and Canada, Robins Hygienic Mats are proving their efficiency, service and durability. A trial will convince you of their superiority.

Order from your dealer or
Write direct to

THE ROBINS HYGIENIC MAT CO.
Howe Avenue

Shelton, Conn.

"DIAL"



No. 09919—1½"
No. 09920—2"

"CLICK"

Non-Sight Operation



No. 09949—1½"
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COMBINATION PADLOCKS

Especially Designed For Greater Convenience and Security. Particularly adapted for use on school lockers, gymnasium wire suit baskets, and to meet the requirements of general padlock needs.

Locks Automatically

Automatically locks when shackle is closed, and throws off the combination. Shackle cannot be locked out when in unlocked position.

MASTER CHARTS

Furnished with each installation for the proper recording of names, locker numbers, lock numbers and combination numbers.

A SAMPLE LOCK WILL BE SENT TO SCHOOL EXECUTIVES GRATIS UPON REQUEST.

Letter Boxes for Schools—Key and Combination

No. 85 COMBINATION LETTER BOX

Made in 3 sizes

Cast Bronze, regularly finished medium statuary. Dials etched, figures raised on black background. Combinations all different.

No. 1702A KEY LETTER BOX

Cast Bronze, medium statuary finish. Pin tumbler lock. 3 keys with each letter box. Key changes practically unlimited.

Size 5½x6¼ in.

All boxes furnished with pigeon holes of various depths. Send for catalogue No. 60.

Manufacturers of letter boxes for 50 years.

CORBIN CABINET LOCK COMPANY
The American Hardware Corporation, Successors
NEW BRITAIN, CONN., U. S. A.

NEW YORK, 96 Lafayette St.
CHICAGO, 319 W. Randolph St.
PHILADELPHIA, 405 Commerce St.



Size 3-2/3x5 inches.

PETERSON

Laboratory and Library Furniture

Now, more than ever before, is quality apparent in Peterson Equipment. Correct design and scientific construction mean long years of satisfactory service. We will gladly submit specifications and quotations without obligation on your part.



1205

A dual-purpose table serving both Physics and Chemistry instruction. Ample drawer and cupboard space. Two compartments in rear for tubing, etc.

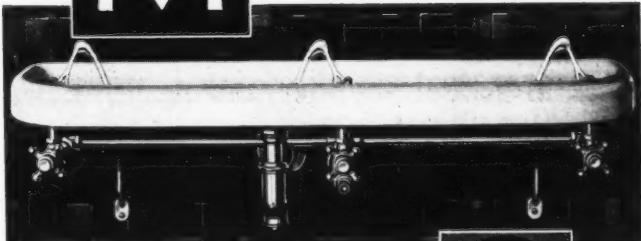
Write for Complete Laboratory and Library Catalog No. 16-A

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MODERNIZE



Halsey Taylor No. 703 Battery Wall Fountain

In the light of today's economic necessities, school replacement programs demand careful study and deliberation before specifying the kind of equipment to use. You must be sure of continued service without annoying maintenance costs. In drinking fountains the Halsey Taylor line today, as always, meets the exacting test of trouble-free service and economy! Write for complete illustrated catalog.

The Halsey W. Taylor Co., Warren, Ohio

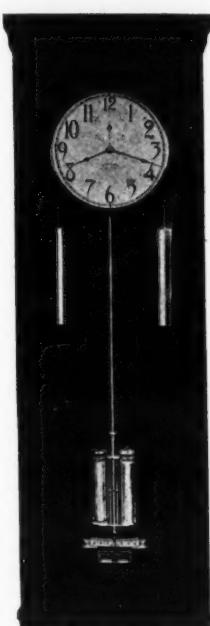
HALSEY TAYLOR
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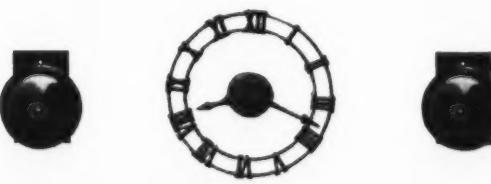
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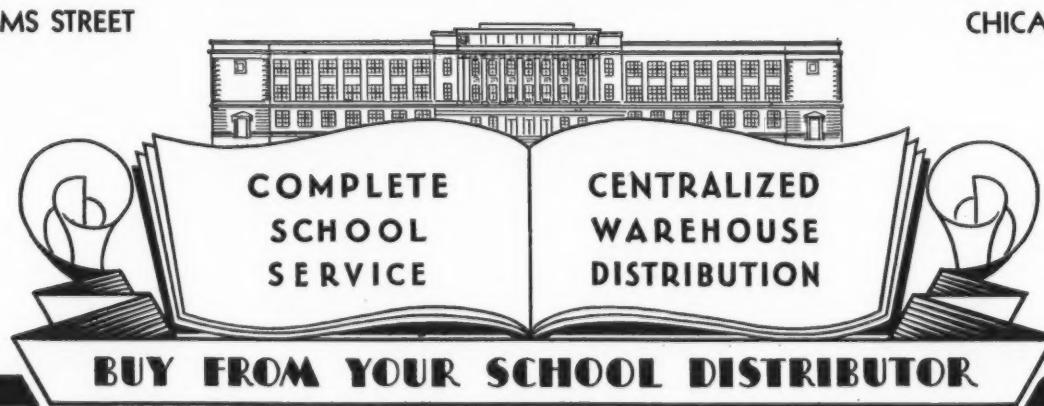
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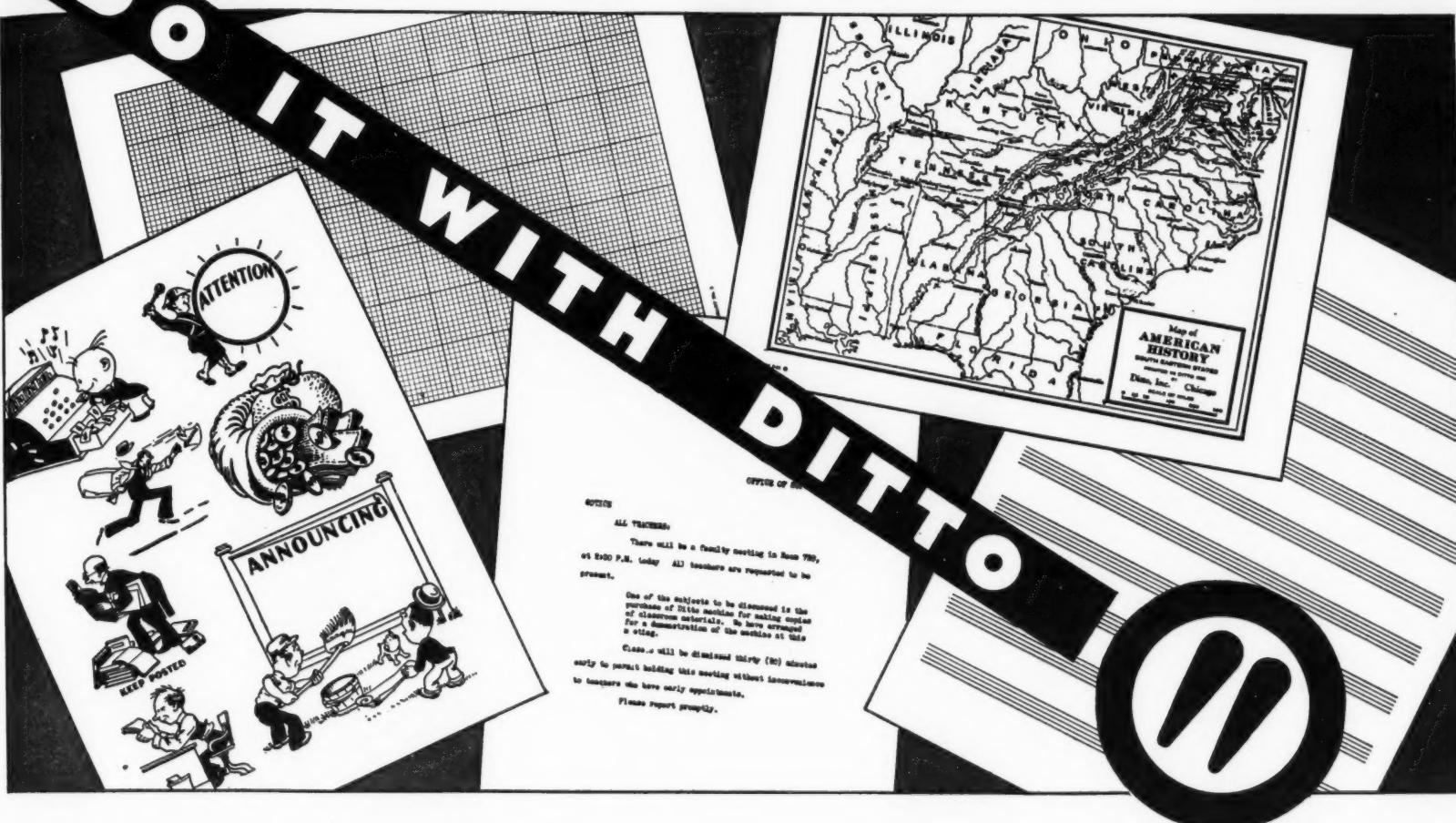
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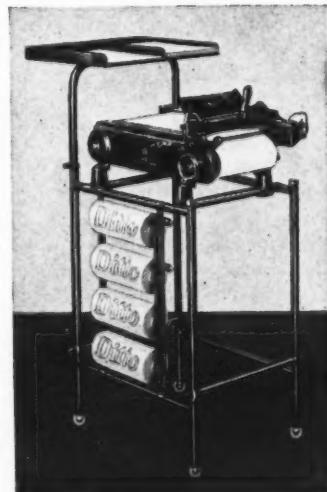
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No. 4

THE AMERICAN School Board Journal

A Periodical of School Administration

Eastern Office:
40 EAST 34TH STREET
NEW YORK, N. Y.

Published on the first day of the month by
THE BRUCE PUBLISHING COMPANY
524-544 No. Milwaukee Street, Milwaukee, Wis.

OCTOBER,
1932

Western Office:
66 E. SOUTH WATER STREET
CHICAGO, ILL.

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Membership on a school board is one of the finest opportunities of public service. But meddlesome, uninformed, or misguided public service may prove more of a nuisance than a contribution. Most errors in school-administrative service may be traced to a lack of information, or to misinformation of the basic facts and principles involved in a problem.

The school-board member who, at the turn in the depression, keeps himself informed on the best practice in school administration, may render the finest public service. To be uninformed in this day of progress is a sin of omission which may cost the community thousands. Efficient economy is the slogan of this paper in this period of depression. The school-board member who reads the JOURNAL conscientiously each month has caught this program and is prepared to carry on. The American School Board is our great balance in this hour of distress and it should be prepared to carry on with the confidence that arises from a knowledge of correct principles wisely applied.

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Subscriptions—In the United States and possessions, \$3.00 per year. In Canada, \$3.50. In foreign countries, \$4.00. Single copies, not more than three months old, 35 cents; more than three months old, 50 cents. Sample copies, 35 cents.

Discontinuance—Notice of discontinuance of subscriptions must reach the Publication Office in Milwaukee, at least fifteen days before date of expiration. Notice of changes of address should

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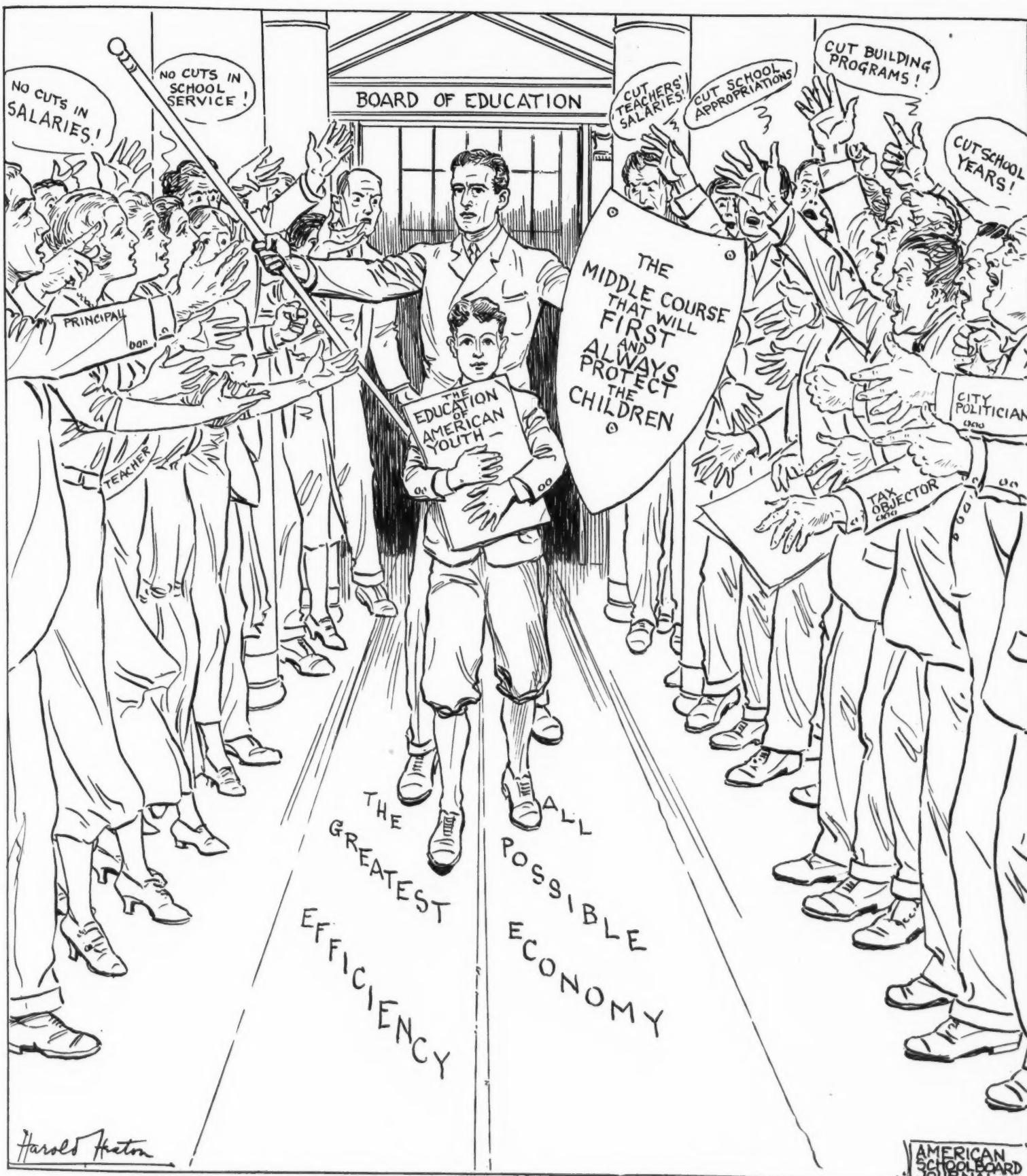
"STANDARD MAKES EVERY MINUTE COUNT"

THE AMERICAN School Board Journal

Volume 85, No. 4

OCTOBER, 1932

Subscription, \$3.00 the Year



THE PATH WIDE ENOUGH, BUT NOT TOO WIDE!

Why Build Schoolhouses Now?

Frank H. Wood, Consultant in Schoolhouse Planning; formerly Director of Division of Buildings, New York State Education Department

It has been said that the construction of buildings is the most important and the most dependable factor in influencing a revival of business. This would seem altogether credible and probable as this field of work draws for its supplies upon the quarries, the mines, and the forests; upon the furnace, the foundry, the factory, and the mill. It employs all classes of labor from the hod carrier and the unskilled helper to the expert artisan, the experienced builder, and the architectural specialist. It calls to its service all manner of transportation facilities and the finished product of a wide range of trades.

In a season of financial stress like the present, it is appropriate to ask whose special obligation it is to originate and initiate building programs. Obviously, it primarily falls to the state and federal governments, and to the various political divisions and subdivisions of the state, the counties, cities, villages, and school districts; in short, to all those political units or entities which draw for their support upon all of the wealth of all of the people and of all of the corporate interests lying within their boundaries. Building projects manifestly should begin where the need is most acute, where the service rendered will prove of greatest value, and where the financial conditions from the standpoint of practical procedure are most favorable.

In the domain of the public school, there is a widespread, urgent need of additional facilities. Since 1929-30, there has been a cessation of school construction similar to that experienced during the Great War. In other respects, however, the situation has been radically different from that which has prevailed so largely in other lines of activity. There has been no diminution in the amount and extent of work in the educational field. To the contrary, there has been a constantly increasing growth, an ever-increasing supply of raw material to work upon, a repeated call for extension of facilities, a manifest need of more laborers and further accommodations.

The public school is the state's most important and most remunerative investment. It not only affords opportunity for expansion, but it presents an insistent and persistent demand for larger plants and increased employment.

All in all, therefore, the conditions are peculiarly opportune to proceed with the construction of school buildings. Wherever the need prevails, the call for action is unmistakable. It is a summons to a duty to be performed, to an obligation to be met.

It would seem proper and profitable to look for advice on the subject to those in position of great prominence and grave responsibilities in the educational world, men of broad experience and wide outlook. What are they thinking, saying, and doing about it?

The State Superintendent of Public Schools, Charles A. Lee, of Missouri, replies as follows:

"We can very well delay the building of a bridge, a road, or any kind of a material improvement during a period of economic stress and then catch up at some future time; but not so with education. Reduced educational facilities for one year can never be made up."

A communication addressed to the schools of Tennessee by the State Department of Education gives this information and advice:

"School buildings are being erected now at a lower cost than at any time since 1917. Architects have time to study school needs and incorporate functional designs into school plans as never before. Contractors and mechanics are anxious for work and materialmen are submit-



MR. FRANK H. WOOD
New York, N. Y.

ting close bids. If the money is at all available for school buildings, and, if there is urgent need, now is the time to put idle men to work and surplus material into construction, and to get the most for the public dollar."

The Bureau of Research of the Ohio State University adds this view: "Millions of dollars could be saved the taxpayers of Ohio alone, if it were possible to lead the voters to see that 'hard times' are good times to issue bonds for needed school buildings."

In an editorial, *THE AMERICAN SCHOOL BOARD JOURNAL*, of Milwaukee, pertinently says this: "If the prevailing evil of unemployment is to be relieved, it must be by enter-

ing upon, rather than avoiding, construction labors."

These illustrations clearly portray the views and convictions of outstanding leaders in the educational world. They appeal to reason.

In conclusion, the motives for instituting a campaign of schoolhouse construction wherever needed may be summarized as follows:

1. The need of it is prevalent and imperative.
2. The service that can be rendered by it is of transcendent importance.

3. Education is the only extensive field of labor, the only general industry, during the period of stress through which we have been passing and from which we are now apparently emerging, where there has been a conspicuous increase in the volume of work and in the extent and value of the output.

4. The public-school organizations in city, village, and country, the pride of the state and nation, are in a unique position to render a two-fold public service, by providing at once needed educational opportunity for their youth, and by giving at the same time employment to all classes of labor, to the toilers working underground, in the air, and on the highways of travel as well as to the many working under the protection of roofs.

5. Building costs are between one fourth and one third lower than at any other period since the close of the Great War. They must inevitably increase soon; in fact, the upward trend has already set in.

6. To build now when the need is pressing and the returns are great would be an ideal exemplification of thrift and economy.

To bring "good times," the wheels of industry must be given an opportunity to turn. Construction should lead the way. Why not begin with the schools?

School-Board Functions and Opportunities A Valuable Handbook

A Handbook for Boards of Education is the title of a distinctly helpful publication recently issued by a group of three city superintendents¹ in the State of North Dakota, in collaboration with two presidents of boards of education in cities of the same state. The booklet, which is rather modestly presented, suggests in the opening chapter the purposes of the American education system and describes rather briefly the methods of administration which have been developed since colonial days when the first town schools were established in Massachusetts. The board of education, as it exists in the United States, is an entirely unique American conception, and the present booklet not only defines the function and scope of boards of education but lays down very practical principles upon which a member of a school board may build his own attitude of mind toward his duties and responsibilities and may govern his actions and relations to his fellow members, the school executives, and the community whose representative he is.

Qualifications of Board Members

The handbook suggests as a basis of its discussion the following qualifications which the

members of boards of education should seek to achieve:

What should be the qualifications of a school board member? Since education today is undoubtedly the dominant factor in the social and political development of our nation, and since education to a large degree, at least, depends for its effectiveness on local boards of education, it is of utmost importance that the men and women who are chosen to such positions of honor and trust represent the highest type of citizenship in the community. While it is difficult to state specifically what the qualifications of a school-board member should be, yet we may state in rather general terms a few fundamental traits which school-board members should possess. The ideal school-board member:

1. Should be unselfish; that is, he should hold the interests of the community and its children above his personal interests.
2. Should appreciate the importance of education to the community and nation.
3. Should be tolerant — especially in matters of religion and politics.
4. Should have the courage of his convictions without being obstinate.
5. Should keep abreast with educational progress.
6. Should possess sound business judgment.
7. Should command the respect and confidence of the community.
8. Should look upon serving on the board as an opportunity for public service.

The question is often asked, "Should not board members have professional training in the field of education in order to administer the school system wisely?" We may answer quite definitely that it is

(Continued on Page 71)

¹Supt. John C. West, Grand Forks, N. Dak., Professor of School Administration, University of North Dakota; Supt. L. H. Dominick; Supt. A. L. Arneson, Leeds, N. Dak. Collaborators: Mr. P. M. Onstad, President of the Board of Education, Grand Forks, N. Dak.; Mr. H. A. Field, President of the Board of Education, Wahpeton, N. Dak. Correspondence may be addressed to Superintendent West.

The Superintendent as a Leader of Principals

Worth McClure, Superintendent of Schools, Seattle, Washington

The evolution of schools in this country has led to a new conception of the principalship. For many years regarded as merely a manager, the principal is looked upon as an educational director. No longer a mere executive, he is the vicarious teacher of every child under his charge—the leader of co-operative effort to utilize courses of study and school activities for the harmonious development of pupil personality.

To this end he coordinates and directs all activities and subjects. The supervisors of specialized subjects are regarded as consulting experts whose services he must enlist for his own growth and that of his teachers and pupils. His approach will be that of a teacher rather than of an autocrat. He must recognize that no school can truly function in the unfoldment of pupil personality, unless, its purposes embrace the unfoldment of teacher personality. From the superintendent's point of view, this picture of growing teachers and growing pupils is incomplete, unless it includes growing principals as well. The past two decades have seen a new school program evolve under the pressure of changing student populations, changing community life, changing curricula, changing instructional method, changing programs of school service, changing material equipment, and changing school plants. These same forces have forced the principal to the fore without adequate preparation or training.

When we speak of *helping the principal to grow*, therefore, we are thinking of helping him to grow in leadership and in the direction of the changing forces just enumerated. Superintendents and principals have been alert to the need and during the past five years particularly, there has been developing in progressive school systems a notable body of procedures looking toward the needs of a changing principalship.

The Preservice Training of Principals

Any discussion of means of securing growth on the part of principals should be incomplete without some reference to the importance of preservice training and experience. Contributions to the standardization of the training of elementary-school principals have been made by the Department of Elementary-School Principals of the National Education Association. The New York State Education Department, under the inspiration of Assistant Commissioner J. Cayce Morrison, and with the assistance of the New York State Council of City and Village Superintendents and the New York State Association of Elementary-School Principals has established a definite program of training at Buffalo State Teachers' College, leading to the requirement in 1932 of a special elementary-school principal's certificate.¹ This program includes the requirement of the degree of a bachelor of science in education, with special courses in administration and supervision, and a period of apprenticeship training. In these days of increased periods of training for teachers and single-salary schedules, it is difficult to see how training equivalent to less than the bachelor's degree can be regarded as at all adequate for the principal. Certainly no new principal with less than that amount of preparation can expect to keep up with, much less to lead, a corps of teachers, many of whom hold a bachelor's degree themselves.

Two years of teaching experience may also be regarded as a minimum prerequisite for present-day needs. Many cities even require previous executive experience. Baltimore reports that during the past ten years, the vice-principalship or a supervisory position have virtually been considered essential preservice experi-

The principalship is assuming a new importance in the minds of school-board members and of superintendents. Some means of assisting principals to better carry on in their important work are described by a superintendent who has been most successful in working for important reforms and improvements in the city where he is chief school executive, through a well defined program of professional assistance to principals—The Editor.

ence, while Seattle has practically accepted previous experience as a head teacher or a supervisor as the standard requirement.

The relation of such eligibility standards to the problem of growth in service is obvious. A few years ago, when the principalship was regarded as the proper station for the respectable interment of the oldest teacher in service, there was no great difficulty in selecting the most eligible candidate. Today standards of selection are necessary in order to determine capacity for, and promise of, growth.

In-Service Training

Salary increments are one incentive to increased training in service. Denver, for example, bestows a \$200 increase in the maximum salary for a master's degree. Baltimore also has a credit system of salary increases above the maximum for experience and efficiency. Promotional recognition for growth has universal acceptance, but the conspicuous absence of any systematic means of rating principals in service in the vast majority of systems, leaves room for doubt as to how successfully this powerful incentive is being utilized. A survey by the present writer of in-service rating reported in the *Fourth Yearbook of the Department of Elementary-School Principals*, indicates that no measuring stick had at that time won sufficiently wide-spread approval to call for more than local usage. Today, however, our concept of the principal's job is sufficiently clear to warrant the development of such a device. Associate Superintendent Armand J. Gerson has recently issued a revision of the Philadelphia blank to principals for their use in self-evaluation which is indicative of the possibilities along this line.

It is the chief purpose of this article, however, to discuss significant programs of professional assistance to principals as carried on in public-school systems.

An interesting feature of the Buffalo program was the scheduling during both semesters of the school year of 1929-30, by Superintendent E. C. Hartwell, of a composite course for elementary-school principals meeting for one hour at 4:30 each Tuesday afternoon.

Speakers were, for the most part, members of the central administrative and supervisory staff or Buffalo principals, but the course was concluded by a series of lectures upon the problems of the principalship, by a member of the faculty of Buffalo State Teachers' College. In this way it was possible to interpret directly to the principals and assistant principals, the policies of the superintendent and his staff with reference to general administration, to the conduct of building organization, to the supervision of each subject in the curriculum, and to present in perspective some of the crucial problems of the changing elementary school. The fact that attendance ran over the 200 mark each week, although only a few more than 100 were required to attend, indicates something of the interest carried by the course. As a further means of capitalizing the good things within the system for the benefit of all, the professional organization of Buffalo principals held each month a professional meeting at some school. The principals assembled at 1 p.m., spent the

afternoon session in visiting classes and viewing school activities, and met in the assembly room for the professional program of one hour, which usually included a discussion of what had been seen during the afternoon. A dinner in the school lunchroom closed the afternoon with fitting observances.

Another interesting feature of the Buffalo program is the *Principal's Handbook*, which provides in convenient form not only the usual rules and regulations, but also many excellent suggestions concerning the conduct of leadership by the principal.

The Pittsburgh plan for assisting the principal to grow in leadership of platoon schools, as reported by Associate Superintendent W. F. Kennedy, is an example of administrative progress toward a definite goal:

In Pittsburgh, the chief business of the principal is considered to be an efficient supervisor of instruction. To that end for a period of some twelve years, endeavor has been centered on means by which he may be strengthened in this work, and at the same time helped along administrative lines.

In order to direct and enlarge the vision of the principal, either of those schools having the platoon organization or those contemplating its adoption, monthly meetings were held in the larger platoon schools for the purpose of studying their operation, checking on activities, and weighing their influences on children. This type of activity occupied the morning session. The noon hour was spent in the enjoyment of a luncheon, served by the home-economics department for a nominal price, and in social intercourse. The afternoon session was devoted to a discussion of topics and problems native to the enrichment of the platoon program. At times demonstrations of auditorium activities, oral expression, and other frequently misinterpreted activities were presented. These conferences were available only to principals, assistant principals, and members of the superintendent's staff. At times evening demonstrations were given in the several sections of the city and were available to both principals and the teachers of the activity demonstrated. The social feature of these meetings was an outstanding and valuable contribution. These conferences were helpful in guiding, enriching, and unifying the platoon program of the city.

An interesting variation of the group visit as already described, is that presented by Assistant Superintendent Robert H. Lane, of Los Angeles, in his article, "The Principals' Group Visit as an Effective Device in Supervision," in *Educational Method* for October, 1929. Through the medium of informal discussion, following visits to classrooms by small groups of principals, a general classification of objectives was brought about, and the assistant superintendent found upward standardization of instruction correspondingly facilitated.

The administrative bulletin is another device employed by Mr. Lane in an interesting manner. Here new activities are stimulated, emphasis is given to progress by the citation of schools and teachers for special accomplishment. Witness the following excerpts:

"SPECIAL BULLETIN

October 2, 1930
To All Elementary and Development School Principals,
Mr. Lane's District.

Dear Friends:

Will you please prepare and deposit in my office, as soon as possible and not later than October fifteenth, the following book:

This book is to have a cardboard cover, not smaller than 8½ by 11 inches, with the name of your school clearly printed or shown in any way you desire. The contents of the book may be

1. Individual accounts of activities under way in your school on which teachers will be working during the present semester.

¹Bulletin "Standards for the Preparation and Certification of Elementary-School Principals," by J. Cayce Morrison. The University of State of New York Press, Albany, 1931.

2. Kodak pictures or drawings of your school plant or school activities.
3. Copies of your school paper.
4. A few samples of any outstanding artwork.
5. Accounts of any features of school life at your school which are of special interest.
6. Anything else you please.

The purpose of this book is to call the attention of the many visitors to my office to the interesting facts about your school. After the book is on file I shall not recommend schools in my district for visitation but will refer inquirers to the books on display so that an intelligent choice may be made."

"Dear Friends:

November 26, 1931.
This is Bulletin No. 5. We are finding your *Books of Our Schools* very interesting and helpful. Many of you have been up to look over the collection, to see how other principals have prepared their materials and to find out what the other fellow is doing. Aside from the suggestions made in the last Bulletin, it is not desirable to have the books uniform. Each school should be free to present its material as it desires so long as the book worthily represents the school from which it comes. Please keep your books up-to-date.

Last time we gave a few references to situations which seemed to us to exemplify that 'high quality of living' which we think the prime characteristic of modern education. It should be clear to all of us that the Activity Program is merely a means to an end—that it provides the setting which makes the 'good life' possible. Please understand that we cannot list all the situations we would like to have you see as space does not permit. However, here are a few among many which may be added to the previous list."

Then follows a list of schools and teachers.

In Oakland, a direct attack on the problem of supervisory leadership was made, under the direction of Assistant Superintendent Rudolph O. Lindquist, during the years 1927-28 and 1928-29. The first approach was the organization of principals and supervisors into groups for the study of specific problems. Thus, if the supervision of reading presented difficulty to certain principals they organized themselves into a group for the study of that problem, and the reading supervisors and assistant superintendent met with them as group members. During the first semester of 1928-29, the city was organized into geographical districts, comprising twelve principals each. District groups met every two weeks. Every principal was asked to submit written plans for the improvement of instruction by September 1. These plans, their execution, and the evaluation of the results were the subjects of discussion in each group.

In order to bring the supervisors, whose contacts had so far been incidental and accidental more definitely into the picture, the spring of 1929 brought forth a request from the assistant superintendent to each supervisor, for a list of the principals whom the supervisor had been able to interest in studying his particular problem and with whom the supervisor was undertaking to work rather intensively for the next semester. The result was that the first conference of the second semester found every principal with a supervisory plan upon which he had previously worked with a supervisor.

In Seattle, the policy is followed of appointing no one to the principalship who does not have the bachelor's degree or its equivalent. Usually principals pass through a try-out period as head teachers, i.e., teaching full time or part time, but in charge of a building of less than eight rooms. The principal is regarded as the responsible head of his school. Special supervisors have complete authority to visit classes, but they serve as consulting experts, whose services the principal is responsible for utilizing. On the other hand, no supervisor may reassign teachers within a school, or order instructional materials, such as books, for use in a given school. No supervisor submits a service rating on any teacher. All ratings are made by principals.

The superintendent's biweekly meeting with principals is the clearing house through which all major educational policies are cleared. Each meeting which lasts from 60 to 90 minutes, is devoted principally to one professional problem. Speakers are principals, teachers, and members of the central staff. Topics for meet-



WORTH McCLURE, Ph.D.
Superintendent of Schools,
Seattle, Washington.

ings grow easily out of the supervisory needs as seen by the superintendent's conference, or by the principals themselves. For example, last year new textbooks were adopted in language, arithmetic, and spelling, each representing a modification in point of view and method. The introduction and proper utilization of each new textbook was the subject of discussion at one meeting.

Following such discussions, demonstrations were given especially for principals by the demonstration-school staff.

Other problems which were cleared through the biweekly meetings last year are:

Standards by which administrators may judge themselves.

A study of the reading difficulties of individual children. (This problem was a follow-up of a three-weeks' survey of reading made by Dean Wm. S. Gray, of Chicago.)

Evaluating the use of reference materials.

Utilizing the fourth-grade survey:

a) To Diagnose building problems.

b) For Guidance of individual pupils.

The Seattle program of assistance to principals also utilizes the following:

A. Committee Service by Principals. Every elementary-school course of study outside of the special studies has been built by a committee of principals, working under the guidance of a member of the superintendent's staff. Every elementary-school course has been criticized by reference committees of principals, assisted by their teachers before being finally approved.

B. Special Demonstrations for Principals. Experience indicates that frequently a discussion following a demonstration can be directed more pointedly at supervisory values if the teachers are not present.

C. Encouragement of Professional Organizations. The Seattle Principals' Association includes all principals but supervisors are permitted to attend professional meetings. Its programs over a period of years have adhered closely to leadership problems of the principal, and the presence of supervisors on programs occasionally, no doubt, has had much to do with the clarity of understanding now existing between the two lines of service.

Voluntary study clubs. These are unique professional organizations. None has more than 15 members and practically every principal is a member of some organization. These clubs carry on independent studies of their own and those desired by the superintendent's office. Last year, for example, each club, under central-office direction, prepared an achievement test in some subject, analyzed the results, and

prepared a report after the test had been given throughout all the schools of the city. One organization has conducted a study of method as exemplified by the work of superior teachers. Another has contributed a standard filing system and office procedures.

D. Educational leaders from outside the system have been brought to Seattle as a matter of policy, to study conditions and to confer with members of the staff. Five nationally known leaders held conferences with the principals.

Rating of principals in service is still regarded as one of the definite means of stimulating and directing growth. This may well take the form of an analysis covering five points:

1. Grading and classification of pupils, including success in making individual pupil adjustments.

2. Leadership of teachers as indicated by the growth of teachers in service.

3. Community relationships—evidence of constructive leadership.

4. Care of the school plant.

5. Skill and expedition in routine administration.

It must be recognized that the chief difficulty in the way of fully realizing the benefits of service rating is the difficulty of the average central staff in knowing the principal's work intimately enough to be just and fair. For this reason the effectiveness of rating depends greatly on the frequency of contact.

Summary

A. The principalship has emerged as a result of the evolution of the modern school.

B. This evolution has proceeded so rapidly that principals have not been adequately trained for their jobs.

C. Superintendents need to recognize in-service training of principals as a new function devolving upon the central staff, for which it is frequently none too well prepared.

D. Progressive school systems recognize the following as desirable objectives in helping principals to grow in leadership.

1. The principal should have an adequate conception of what American education aims to do. Lip service to passing catch words is dangerous.

2. He should have besides, a philosophy of education, a philosophy of his own job in its relationship to his school, and to the rest of the system.

3. He should know something of the technique of leadership—how to organize, and how to get things done; how to help teachers, and how to remedy the educational maladjustments of pupils.

4. He should develop a set of standards by which he can constantly measure his school and himself.

5. He should develop a professional vitality which will keep him from succumbing to the pressure of executive duties and which will enable him to keep abreast with the rapid march of the educational movement.

Boards of education and superintendents today, must look not only to the elimination of waste motion and needless expense; they must also be earnestly concerned with securing the utmost of value from every dollar expended. Not only in the first, but also in the second respect is the principalship a key position. A staff of alert, growing principals can produce more real educational service even from a financially handicapped school program than can be realized from one generously financed, if the corps of principals in the latter instance is not professionally minded.

Despite progress of the past few years, the principalship is still a much-neglected resource of the school system. The superintendent, therefore, must face the fact that growth of principals in service is both a fundamental objective and a crucial test of his own leadership.

The Status of Kentucky Boards of Education

Superintendent Walter F. Coop, Liberty, Kentucky

The data for this investigation treat of the school boards which control public education in cities, counties, and independent graded-school districts in Kentucky. There are 67 city school boards. The cities range in population from 1,500 to 300,000. All city school boards in the state total a membership of 423. Each of the 120 counties has one board of education of five members. Each of the 196 independent graded-school districts has a school board with five members. The three types of school boards in the state total a membership of 2,003.

The data were obtained from the superintendents of city schools, from county superintendents, and from the principals of independent graded schools by questionnaires and visits. About 20 per cent of the city superintendents, county superintendents, and independent graded-school principals of the state were visited for the purpose of gathering information for this study and for getting some idea as to the accuracy of the information given. The

TABLE IV. Number of Hours School-Board Members Devote Annually to School Duties Not Including School-Board Meetings

Hours Spent Annually	City Board Members			County Board Members			Independent Graded School-Board Members			Total
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	
0	32	12	32	8	101	18	165	14		
1-19	95	37	109	28	222	39	426	35		
20-39	59	23	72	18	120	21	251	21		
40-59	40	15	55	14	56	10	151	12		
60-79	9	3	38	10	31	6	78	6		
80-99	4	2	18	5	3	1	25	2		
100-119	9	3	49	13	24	4	82	7		
120-139	4	2	3	1	0	0	7	1		
140-159	2	1	5	1	3	1	10	1		
160-179	0	0	1	*	0	0	1	*		
180-199	0	0	0	0	1	*	1	*		
200-219	4	2	8	2	0	0	12	1		
220-239	0	0	0	0	0	0	0	0		
240-260	1	*	0	0	2	*	3	*		
Total	259	100	390	100	563	100	1,212	100		
Median	20.8	35.4			17.2		21.1			

*Per cent too small to be expressed in this table.

Table II indicates the amount of time that school boards spend in meetings. No city school board reporting spent more than three hours in

members who have served nine to twelve years as school-board members is almost twice as large with the city school boards as it is with either of the other types of school boards. The median tenure shows that city school-board members serve longer as board members than do members on county or independent graded school boards. Fifty per cent of the county and independent graded school-board members serve only one term as members. A city school-board member is more likely to be elected for another term as a member than either a county or an independent graded school-board member.

Table IV summarizes the data of the time that school-board members spend annually in school-board duties outside of school-board meetings. Fourteen per cent of the school-board members of the state give no time annually to school-board duties outside of school-board meetings. There are three persons reported who spend 240-260 hours annually in school duties outside of school-board meetings. County school-board members spend more time annually in school duties outside of school-board meetings than members of either of the other types of school boards. The independent graded school boards spend less time annually in school duties outside of school-board meetings than either the county or city school-board members. The independent graded school systems are smaller than either of the two other systems.

Table V shows the representation of the sexes on school boards in Kentucky. It seems, since the passing of the Nineteenth Amendment to the Constitution in 1920, that the men and women in the cities have taken the most liberal views of the place of women on school boards. Personal interviews with superintendents reveal almost unanimous estimate that women make poor school-board members. Practically all of these superintendents had no women on the school board which employed them. One superintendent stated that women had a place on the school board and should be represented. Whatever the correct answer may be, Kentucky has yet to find it.

Table VI reveals a partial list of the community activities in which school-board members take an active interest. The church receives the greatest attention by school-board members. The largest percentage for no activity among county school-board members is probably due

TABLE I. Number of Times School Boards Meet Annually

Number Annual Meetings	Independent			Graded			Total
	City Boards	County Boards	School Boards	City Boards	County Boards	School Boards	
1-6	1	2	11	8	12	4	
7-12	34	62	90	62	168	56	
13-18	15	27	36	25	97	32	
19-24	3	5	10	4	20	7	
24-45	2	4	0	1	4	1	
Total	55	100	145	100	301	100	
Median	12.7	15.0	12.6		12.8		

TABLE II. Time School-Board Members Spend in School-Board Meetings

Hours Per Meeting	Independent			Graded			Total
	City Board Members	County Board Members	School Board Members	City Board Members	County Board Members	School Board Members	
1-2.5	52	95	15	129	89	196	66
3-4.5	3	5	31	15	10	49	16
5-6.5	0	0	45	0	0	45	15
7-8.5	0	0	7	1	1	8	3
Total	55	100	98	145	100	298	100
Median	2.5		4.6	2.3		2.8	

persons interviewed knew less about age, income, education, and time that members devote to school duties outside of school-board meetings than any other questions. Eighty-six per cent of the school-board members of the state

meetings. The number of hours spent in single school-board meetings by county school boards indicates a large amount of business to be transacted, or that it takes these school boards a long time to transact the ordinary business of the

TABLE III. Number of Years Served as School-Board Members

Number Years Served	Independent			Graded			Total
	City Board Members	County Board Members	School Board Members	City Board Members	County Board Members	School Board Members	
1-4	140	38	269	50	404	53	813
5-8	87	23	146	27	201	26	434
9-12	92	24	67	13	100	13	259
13-16	32	9	32	6	28	4	92
17-20	8	2	15	3	16	2	39
21-24	6	2	4	1	5	1	15
25-28	2	1	1	*	4	1	7
29-32	4	1	0	0	1	*	5
33-36	0	0	0	0	3	*	3
Total	371	100	534	100	762	100	1,667
Median	7.3		5.3		4.7		5.2

*Per cent too small to be expressed in this table.

were represented in answers to the questionnaires and visits.

Table I shows the number of times school boards meet annually. The number of times a school board meets annually may be taken as an indication of the amount of business a school system transacts. The median number of times the three types of school boards meet annually indicates that the business is about as important in one type of school board as in the other. Four per cent of the school boards of the state have very little school business to transact, or these school boards may lack a vital interest in the training of the young people. Each year the school boards of the state meet a few more than one time per month.

county schools. The independent graded school boards spend less time in school-board meetings than either of the other types of school boards. The county school boards spend more time in school-board meetings than either of the other types of school boards.

Table III summarizes the number of years school-board members have served on school boards. The percentage of city school-board

TABLE V. Sex of School-Board Members

Sex of Board Members	Independent			Graded School-Board Members			Total
	City Board Members	County Board Members	Independent	City Board Members	County Board Members	Graded School-Board Members	
Men	355	94	98	780	99	1,665	97
Women	22	6	2	12	1	44	3
Total	377	100	100	792	100	1,709	100

TABLE VI. Principal Community Activity of School-Board Members

Activities	City Board Members		County Board Members		Graded School-Board Members		Total
	Number	Per Cent	Number	Per Cent	Number	Per Cent	
Church	187	54	262	66	274	48	723
"No Activity"	19	6	49	12	121	21	189
Rotary	57	17	0	0	19	3	76
Lodge Work	8	2	21	5	34	6	63
Parent-Teach. Assn.	3	1	23	6	30	5	56
Kiwanis	24	7	3	1	10	2	37
Politics	2	1	9	2	10	2	21
Agri. Clubs	0	0	13	3	2	*	15
Chamber of Com.	0	0	0	0	14	2	14
All Other Activ.	45	12	16	5	62	11	123
Total	345	100	396	100	576	100	1,317

*Per cent too small to be expressed in this table.

TABLE VII. Occupations of School-Board Members

Occupations	City Board Members		County Board Members		Graded School-Board Members		Total
	Number	Per Cent	Number	Per Cent	Number	Per Cent	
Farmers	25	7	429	80	214	27	668
Merchants	74	20	32	6	131	17	237
Doctors	27	7	18	3	40	5	85
Bankers	19	5	3	1	41	5	63
Insurance Men	23	6	2	*	6	1	31
Millers	5	1	2	*	23	3	30
Dentists	14	4	0	0	14	2	28
Housekeepers	15	4	5	1	6	1	26
Lawyers	10	3	0	0	13	2	23
Salesmen	9	2	4	1	10	1	23
Lumber Dealers	11	3	2	*	9	1	22
Carpenters	0	0	2	*	19	2	21
Clerks	6	2	0	0	15	2	21
Laborers	0	0	4	1	16	2	20
Mine Foremen	0	0	6	1	14	2	20
Druggists	8	2	2	*	9	1	19
Miners	4	1	0	0	14	2	18
Mechanics	6	2	0	0	12	2	18
Manufacturers	13	3	0	0	4	1	17
All Others	103	28	27	6	177	21	307
Total	372	100	538	100	787	100	1,697

*Per cent too small to be expressed in this table.

to farm interests which, the farmer feels, need constant attention. Nonmembership in clubs of the independent graded school-board members may not be due to lack of interest in activities, but because activities do not exist in these small villages. The nine activities listed in Table VI are probably the activities with the greatest membership of people not school-board members as well as that of school-board members. It is through these activities that community programs of any nature may be carried on effectively.

Table VII provides data on 19 of the 102 occupations of school-board members. The callings of school-board members can be taken as an important measure of the breadth and variety of interests and points of view represented by boards of education. The occupation of man is a fundamental economic factor in our civilization. It more or less determines the particular place of residence, social standing, educational

standing, and opportunities of recreation. The farmers, merchants, doctors, and bankers dominate the school boards of the state. These four occupations represent 63 per cent of the school-board members of the state.

TABLE X. Age of School-Board Members

Age of Board Members	City Board Members		County Board Members		Graded School-Board Members		Total
	Number	Per Cent	Number	Per Cent	Number	Per Cent	
23-32	13	4	17	3	42	6	72
33-42	90	26	73	14	215	29	378
43-52	147	42	237	45	294	39	678
53-62	74	22	148	28	153	21	375
63-72	20	6	48	9	32	4	100
73-82	0	0	6	1	4	1	20
Total	344	100	539	100	740	100	1,613
Median	48.3		50.0		46.2		48.2

Table VIII presents data on the number of school-board members who have children in school. Having children in school is thought to give a school-board member a vital interest in

the affairs of the school. These data reveal that there is more than one child in school for each school-board member. Larger families are found among county school-board members than among city or independent graded school-board members. These data show that fewer persons are elected as school-board members in larger communities who have children in school. The members of eight school boards have no children in school. These school boards are located in the central and slightly west of central part of the state. In the eastern part of the state, which is almost entirely rural, school-board members are usually elected, who have children in school. The two school-board members represented in Table VIII as having eleven and twelve children in school are located in the eastern part of the state.

Table IX gives information concerning the church membership on school boards. There is one nonchurch member for every 22 school-board members on the city school boards, there is one for every 6 on the county school boards, and there is one for every 6 on the independent graded school boards. The tabulations reveal that there are six school boards without a church member — 3 among the county school boards, and 3 among the independent graded school boards. There are 195 school boards with all members a member of some church.

Table X gives data concerning age of school-board members. The ages of the school-board members are concentrated between 43 and 52 years. The median age of school-board members is within this range. It is a general belief that the older a generation grows the more conservative it becomes, and it is more inclined to look toward the past. On the whole, the state has members of boards of education relatively young and vigorous, members in the prime of life, and members both old and young. So far as age has to do with interests of society, those

TABLE VIII. Number of School-Board Members Having Children in School

Number of Children in School	City Board Members		County Board Members		Graded School-Board Members		Total
	Number	Per Cent	Number	Per Cent	Number	Per Cent	
0	165	46	197	37	242	31	604
1	86	24	100	19	226	29	412
2	66	18	105	20	159	20	330
3	27	8	62	11	90	11	179
4	6	2	40	7	48	6	94
5	2	1	18	3	15	2	35
6	2	1	11	2	9	1	22
7	0	0	3	1	3	*	6
8	0	0	2	*	0	0	2
9	0	0	0	0	0	0	0
10	0	0	1	*	0	0	1
11	0	0	1	*	0	0	1
Total	354	100	540	100	792	100	1,686
Median	1.1		1.7		1.6		1.3

*Per cent too small to be represented in this table.

TABLE IX. Number of Church Members Among School-Board Members

Members of Church	City Board Members		County Board Members		Graded School-Board Members		Total
	Number	Per Cent	Number	Per Cent	Number	Per Cent	
Members	351	96	460	87	688	84	1,449
Not Church	16	4	70	13	121	16	207
Total	367	100	530	100	809	100	1,656

interests would seem to be in position to get a reasonable hearing before school boards of the state.

Table XI shows the members of school boards who own their homes. One out of every 12 city school-board members does not own a home, one out of every 45 county school-board members does not own a home, and one out of every 7 independent graded school-board members does not own a home. The data of this table reveal that the residence of school-board members is highly stable. The smallest percentage of instability is found among county school-board members with 2 per cent not owning a home. The highest percentage of instability is found among the independent graded school-board members with 14 per cent not owning a home.

Table XII presents data concerning the ownership of business of school-board members. One out of every 4 city school-board members does not own a business, one out of every 15 county school-board members does not own a business, and one out of every 4 independent graded school-board members does not own a business. The large percentage of school-board members owning a business is an indication of stability in boards of education. It also indicates that school-board members are successful

TABLE XI. School-Board Members Owning a Home

City Board Members	County Board Members		Graded School-Board Members		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Home Owners.....	341	92	528	98	679	86
Not Home Owners.....	30	8	12	2	113	14
Total	371	100	540	100	792	100
					1,548	91
					155	9
					283	100

TABLE XII. School-Board Members Owning a Business

Owning a Business.....	City Board Members		County Board Members		Graded School-Board Members		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Owning a Business.....	268	73	505	94	587	75	1,360	81
Not Owning a Business.....	99	27	34	6	195	25	328	19
Total	367	100	539	100	782	100	1,988	100

TABLE XIII. Income of School-Board Members

Upper Fourth.....	City Board Members		County Board Members		Graded School-Board Members		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Upper Fourth.....	155	46	259	50	362	50	777	49
Third Fourth.....	77	23	102	20	192	26	371	24
Second Fourth.....	96	29	131	25	141	19	368	23
Lower Fourth.....	8	2	23	5	33	5	64	4
Total	336	100	515	100	728	100	1,579	100

business men and ought to be successful in handling the business of the schools.

Table XIII presents facts about the standing of school-board members in their communities with respect to income. Almost 50 per cent of the school-board members are classified as having an income in the upper fourth. These members are among the most successful business men of the community. The small number of school-board members classified as having an income in the lower fourth would seem to indicate that the voters of the state consider persons more favorably as school-board members who have an income above this level.

Table XIV reveals the important levels in the education of school-board members. The important levels are found at the completion of the eighth grade, twelfth grade, and sixteenth grade. Only two school-board members have gone beyond the A.B. degree, one is on a county school board, and one is on an independent graded school board. One school board, a city school board, has all members college graduates. This study indicates that the three types of school boards reflect the educational level which surrounds them. Occasionally, more noticeable among the city school boards, the members have attained a higher educational level than that

which surrounds them. A study of the data in Table XIV shows quite clearly, as to educa-

One may wonder if long tenure tends to make better school-board members. To find the answer to this question, city superintendents, county superintendents, and independent graded school principals were asked to rank school-board members as board members. The best school-board members were ranked first, the next best were ranked second, and the third best were ranked third, etc. The median number of years served by school-board members ranked first is 8.1, by members ranked second the median number of years is 6.2, by members ranked third the median number of years is 4.5, by members ranked fourth the median number of years is 3.9, by members ranked fifth the median number of years is 3.3, and by members ranked sixth the median number of years is 5.2.

The data revealed that *school-board members who have served the longest as members are consistently ranked highest in value as school-board members* by superintendents and principals.

Table XV is a study to find how often the chairmen have been ranked in first place as school-board members. According to city and county superintendents, city and county school-

TABLE XVI. Correlation Between Time School-Board Members Take Up in Board Meetings and Value as School-Board Members

	City Board Members		County Board Members		Graded School-Board Members		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
1.00	11	32	9	11	21	16	41	17
.90 to .99	6	17	21	26	53	40	80	32
.80 to .89	4	12	5	6	12	9	21	8
.70 to .79	3	9	2	2	3	2	8	3
.60 to .69	1	3	6	8	5	4	12	5
.50 to .59	2	6	1	1	1	1	4	2
.40 to .49	0	0	6	8	4	3	10	4
.30 to .39	1	3	2	2	3	2	6	2
.20 to .29	1	3	0	0	1	1	2	1
.10 to .19	0	0	3	4	7	5	10	4
.00 to .09	3	9	3	4	4	3	10	4
—.10 to —.19	0	0	3	4	6	4	9	4
—.20 to —.29	0	0	0	0	0	0	0	0
—.30 to —.39	0	0	0	0	2	1	2	1
—.40 to —.49	1	3	3	4	1	1	5	2
—.50 to —.59	0	0	1	1	0	0	1	*
—.60 to —.69	1	3	2	2	0	0	3	1
—.70 to —.79	0	0	2	2	1	1	3	1
—.80 to —.89	0	0	4	5	1	1	5	2
—.90 to —.99	0	0	7	9	8	6	15	6
—1.00	0	0	1	1	1	1	2	1
Total	34	100	81	100	134	100	249	100

*Per cent is too small to be shown in this table.

ditional qualifications, school-board members represent a large degree of selection.

board members select the highest ranking members on the board as chairman on more than 64 per cent of the school boards. This occurs on 50 per cent of the school boards in the independent graded school boards.

The data in Table XVI gives the correlation between the time school-board members take up in board meetings and their value as school-board members. Some authorities in educational statistics consider .70 as a high positive correlation. Taking this as a basis, city school superintendents and independent graded school principals feel that a valuable school-board member will take up more time in board meetings than members of little value. The county superintendents have a strong tendency to rank school-board members low who take up a great deal of time in board meetings.

Do the most valuable school-board members spend more time annually in school duties outside of school-board meetings, than do school-board members of less value? The median number of hours spent annually in school-board duties outside of board meetings, for members ranked first is 38.0 hours, for members ranked second it is 28.6 hours, for members ranked third it is 20.3 hours, for members ranked fourth it is 19.2 hours, for members ranked fifth it is 15.5 hours, and for members ranked sixth it is 17.3 hours. The data revealed that, with one exception school-board members who are ranked highest as board members spend the most time annually in school duties outside of board meetings.

(Concluded on Page 72)

TABLE XIV. Education of School-Board Members

Grade Completed	City Board Members		County Board Members		Graded School-Board Members		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
0	0	0	0	0	4	1	4	*
1	0	0	1	*	2	*	3	*
2	0	0	0	0	0	0	0	0
3	1	*	2	*	4	1	7	*
4	5	2	12	2	13	2	30	2
5	1	*	14	3	24	3	39	3
6	4	1	39	8	39	5	82	5
7	1	*	18	4	17	2	38	2
8	53	17	302	60	288	39	643	41
9	3	1	7	1	25	3	35	2
10	9	3	19	4	27	4	55	4
11	4	1	0	0	5	1	9	1
12	104	33	54	11	148	20	306	20
13	11	4	7	1	24	3	42	3
14	34	11	6	1	41	6	81	5
15	2	1	1	*	1	*	4	*
16	83	26	25	5	71	10	179	12
17	0	0	0	0	1	*	1	*
18	0	0	0	0	0	0	0	0
19	0	0	1	*	0	0	1	*
Total	315	100	508	100	734	100	1,557	100
Median	12.7		8.5		8.9		8.9	

*Per cent is too small to be shown in this table.

TABLE XV. Rank of Chairman and Other School-Board Members

Chairmen in	City Board Members		County Board Members		Graded School-Board Members		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
First Place	29	64	63	68	73	50	165	58
Others in								
First Place	16	36	30	32	72	50	118	42
Total	45	100	93	100	145	100	283	100

School-Board Heads Who are Making History in American Education

DR. W. H. ANDREWS

President of the Board of Education,
Manhattan, Kansas

For almost a quarter of a century Dr. W. H. Andrews, of Manhattan, Kansas, has been a member of the board of education. During this period his impress has been made upon the public schools as has that of no other single individual. He has seen the school system grow from 816 pupils without kindergartens or a high school, to a complete urban school system, en-



DR. W. H. ANDREWS
President, Board of Education,
Manhattan, Kansas.

rolling 2,554, with as many pupils in the upper six grades as in the lower six. During his service on the board of education the entire school plant has been built anew.

Dr. Andrews has constantly given of his time, energy, and professional ability to serve the true best interests of the boys and girls of Manhattan and of the taxpayers who support the schools. For eight of these years he has been president of the board which position he now holds.

There are but few, if any, school-board members in the entire nation, who have occupied so unique a position on boards of education as has Dr. Andrews. From every angle of school administration he has had continuing personal, intimate contacts and knowledge of school affairs, because during his entire time as a member of the board he has been a professor in the Kansas State College, and for a long period professor of educational administration. Preceding his service in the College, he taught in the rural schools of Kansas, and served in an honorable and constructive manner as principal and superintendent in several Kansas cities. He also knows public-school life from the point of view of a parent, for both a son and a daughter have passed through the Manhattan schools and have been graduated from its senior high school.

Dr. Andrews holds his A.B. degree from the University of Chicago, his M.S. from the Kansas State College, and his Ph.D. from the University of Chicago.

MRS. KATE N. KJORLIE

President, Board of Education, Fargo,
North Dakota

Mrs. Kate N. Kjorlie was elected a member of the Fargo board of education in 1926 and has served since that time. She has been almost continuously a member of the Teachers' Committee, and in May, 1932, she was chosen pres-

The contribution made by leaders in the field of school administration was never more intense and at the same time more gratifying than it is at the present time. Those who head the board of education, though, are usually identified in an intimate way with the economic, civic, and social activities of their respective communities.

Thus, they are also exposed to the influences which at times batter their opposition to the cause of popular education in the guise of economy and retrenchments which are retrogressive in spirit and harmful in fact. The country must, in the stress and storm of a disturbed condition, look to these leaders for that calm steadfastness and guidance so essential to the school administrative service.

The biographical sketches here presented were in every instance prepared by writers who were in close contact with their subjects. They have lifted into view the true merits of the persons here discussed and thus provided a series of character studies well worthy the attention of the American school public.

ident. Her period of service has been marked by a keen, constructive interest in the schools, particularly the elementary schools, and by a personal interest in the welfare and professional status of the teachers. She has devoted much



MRS. KATE N. KJORLIE
President, Board of Education,
Fargo, North Dakota.

attention to the securing of efficient facilities for the operation of school buildings and of healthful working conditions for children and teachers.

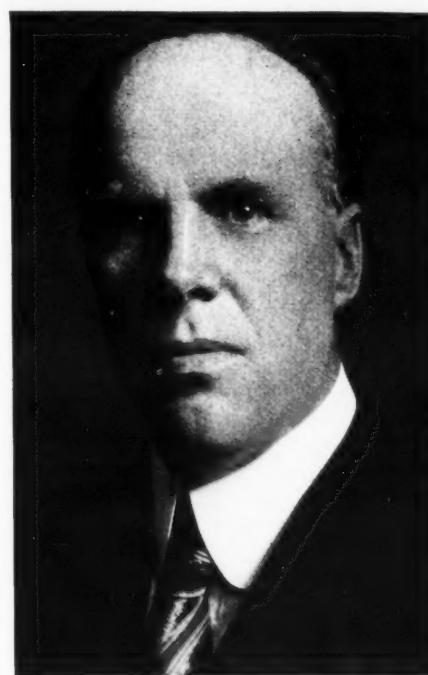
Mrs. Kjorlie, who is a graduate of the Moorhead, Minn., State Teachers' College and of the University of Minnesota, was a teacher for some years previous to her marriage. She has been active in parent-teacher work and has held high office in local and state associations. As a delegate she has attended several national meetings. She is a member of the Federated Women's Clubs, and a leader in social and church work.

Mrs. Kjorlie heads the Fargo board of education at a time when greatly reduced budgets have been necessitated and major retrenchments in school work have been undertaken. To continue school affairs under present economic conditions without seriously injuring the instructional efficiency of the schools or weakening the educational morale of the community requires leadership of a high order. Mrs. Kjorlie's past attitudes and achievements are commanding the confidence of parents and citizens as well as of the school staff in the difficult work of the present and immediate future.

JUDGE T. N. HARVEY

President, High-School Board of Education, Bakersfield, California

Judge T. N. Harvey is president of the high-school board of education of one of the few large high schools of California (registration, 2,950 high-school students and 480 junior-college students) and in that capacity has unselfishly given to the Kern County Union High School District whole-hearted service that has been of incalculable value to the constituency during the



JUDGE T. N. HARVEY
President, High-School Board of Education,
Bakersfield, California.

recent years of financial stringency. The value of his good judgment has been well expressed by Principal H. A. Spindt, district superintendent, who recently said: "Judge Harvey is one of those few board-of-education presidents who never denies a necessity, but who also knows just when to say No."

Judge Harvey was born near Toronto, Canada, was graduated from Ottawa Normal School and taught school, which experience makes him an appreciative board member. In 1906 he moved to San Francisco where he matriculated in Hastings School of Law, joined the law firm of Peck and Boynton, and in due time was admitted to the bar. After his marriage in San Francisco, the Harveys moved to Bakersfield in 1910, where Judge Harvey has since been engaged in law practice, except for six years when he served as judge of the Superior Court and of the Juvenile Court of Kern County.

He belongs to the Rotary Club, has been chairman of the Boy Scout Council for several years, president of the Bakersfield Chapter of the American Red Cross. He recently has been appointed a member of the State Board of Trustees of the California Institute for Women, by Governor Rolph, of which board he is vice-president. He was elected to the high-school board of trustees in 1928, and for the past two and a half years has been president of that body.

The Kern County Union High School District comprises about two thirds of the county, whose area approximates that of the State of Massachusetts, and maintains three high-school plants. One is at Bakersfield, built at a cost of considerably over a million dollars; and two smaller buildings are at Shafter and McFarland, respectively.

Who is the Good School-Board Member?

Hon. Richard Murphy, President of the Board of Education, St. Louis, Missouri

Technically the duties of the board of education are fixed by law, but practically they inhere in the nature of the work to be accomplished. The American people believe in public education; and they have spared no expense to make education universal. They have chosen boards of education to see that this goal is accomplished. A school-board member must know the will of the people regarding their schools, must speak for the people on matters of educational policy, must think and act for the people with reference to ways and means of financial support. Regardless of legal stipulations, the function of representing the public adequately is a major obligation for anyone who becomes a member of a board of education.

Cities are spending, on the average, more than a third of their public revenue for education. According to *Financial Statistics for Cities Having a Population of over 30,000 in 1930*, published by the United States Census Bureau, the cost of schools in those cities for that year was more than a billion dollars. The well-considered disbursement of this large amount of public money constitutes in itself no small responsibility.

The original public-school system, which included only the common schools, and taught only the three R curriculum, has extended its function to include high school, college, and vocational education. Even the elementary school has greatly widened its scope of activities. Evening schools and adults' education have been included, playground and recreational opportunities are being fostered, and special classes of numerous kinds for handicapped children are being organized. Boards of Education, backed by public sentiment, have approved this expansion of school opportunities to such a degree that they now find themselves wrestling with a new problem, that of balancing the budget, which today is one of the major preoccupations of boards of education throughout the country.

The School Board's Functions

Briefly, the managerial responsibility of financing and conducting public schools rests officially upon the board of education. Years ago, however, these functions became so complex and strenuous in the large centers of population that it became necessary to employ superintendents and other executive officers, and to delegate to them all technical responsibilities. The paid executives are chosen for their special fitness to manage the affairs of the school system; and are held accountable to the board of education. The policies of these executives are subject to review and approval by the board, without, however, interference that hampers their freedom of action. The board's influence in shaping policies is exercised usually through conference and counsel with the school executives. To some extent, however, boards of education properly initiate modifications in school policy through the exercise of their legislative function.

In most cities a school-board member comes to his position as a result of direct election by the people, but in some he is appointed by the mayor or other governmental agency. In any case, however, he holds his position as representative of the citizens of his community, and his official action, therefore, has fundamental reference to the welfare of the community. His business is to utilize the sentiments and the resources of the public to provide the best possible means of education for the children.

It is not always easy to know what action the welfare of the community or the best interest of childhood demands. Even if a school-board member is convinced strongly in his own mind that a certain action should be taken, the situation is still very difficult at times. It is difficult if he finds that his conviction runs counter to the policy initiated by the executive officers, and especially so if counter to the opinion of the majority of his fellow members. Because such situations arise from time to time, the duties of a school-board member are much easier to enumerate than to perform.

Qualities of a Good Member

"Who is the good school-board member?" That is the question I have been asked to discuss in this paper.

First, a good member must give loyal support to the executive officers on whom the board has placed managerial responsibilities; he must trust the expert judgment of those who are chosen because of their special fitness to direct the various affairs of the school system. But can he do this implicitly, affirmatively, and without independent investigations of his own? To do so would be to make of himself merely a figure-head. His function is, in reality, twofold — on the one hand, to pass judgment on the policies of the executive officers, and, on the other, to aid them in the discharge of their duties. A good school-board member will be an aid to the school executives in serving as a mediating factor in bringing into harmony the will of the community and the actions of the school executives.

Second, the quality of helping to promote co-operation is characteristic of a good board member. Harmony is essential in effective school-board work. A man cannot be sure that his own opinion is final and infallible. When he finds himself in the minority, he must know the art of making a compromise or conceding a point. When the whole board has acted, he must persevere in keeping faith. He must not, through his personal effort, endeavor to thwart the will of the majority thus expressed. In brief, a good board member must know and practice the art of co-operating.

A third characteristic of a good member of the board is his ability to hold the confidence of the employed personnel. Teachers and other employees need to feel that the board of education will give them moral support when their duties are performed honestly and well. It would be difficult for a school superintendent to develop a proper spirit and enthusiasm for the work of the schools, unless he is supported by a board whose members personally command the respect and confidence of those who are employed in the school system.

The Problem of Legislation

The fourth quality of a good school-board member, and the last I shall mention, although many others might be named, is active interest in the conditions which make a good school system possible. Assuming that public sentiment favors good schools, which is nearly always a safe assumption to make, the conditions necessary for a good school system are founded mainly on legislation. School laws have an important effect on the ability of any community to create and maintain good schools. School laws, however, do not come into existence unaided and unsponsored, as a rule. Back of their enactment must lie the active interest of public-spirited citizens and organizations. I venture to say that no school board can perform its full duty without an active legislative committee, and that no board member can be a good member with-

out a live and critical interest in all proposals to modify the school law.

The obligation to take part in modifying and improving school laws is worthy of emphasis. A school system may be hampered by laws that are outgrown or otherwise inadequate. The maximum tax limit may be too low; the powers of the administrative and the executive officers may be inadequately defined; provisions safeguarding the public funds may not be sufficiently explicit. Social improvement through the schools' activities may be a fundamental need in large urban communities. A retirement system for teachers is frequently omitted from legislative enactments. In Missouri, for example, where no retirement provision has been made, a teacher growing old in the service in many instances faces the termination of that service by an action which the board of education may regard as an unworthy conclusion of an honorable career. This manner of dealing with teachers who have rendered perhaps a half century of noble service is neither a compliment to our democracy nor compatible with humanitarian standards. So long as this condition exists, school-board members must continue their efforts to secure laws for the betterment of the schools.

Another phase of the school law that will require more and more the thought of school boards is the taxing system. Many communities in the United States are finding the general property tax inadequate. The burden on taxpayers is sometimes heavy and even prohibitively high. A taxation system that distributes burdens in proportion to the ability to pay accords with the principles of justice and likewise, in many instances, adds to the revenue that is needed for the proper operation of the schools. The total amount of money which the nation spends for schools is small, however, in comparison with the annual expenditures for amusements, luxuries, and many other items which are less essential than education. In fact, according to statistical estimates, slightly more than two per cent of the nation's income is expended for education and less than 2 per cent of the nation's wealth is invested in school property.

Why St. Louis Has Good Schools

The independence of school systems that leaves them uninvolved in the affairs of municipal government is a matter of serious legislative concern. The framers of the law that governs the schools of St. Louis were careful to provide for such independence and also to define the functions of the school board's executive officers. The charter of the St. Louis school system, framed by far-seeing educators and legislators, assures to the people of St. Louis a school administration, so organized that administrative measures lodged in the board's executives may be consistently and consecutively carried out. The power of initiative resides in the officers. It is the board's function to approve or disapprove the recommendations placed before it. In this way the schools of St. Louis have since 1897, when the law was enacted, come to be recognized throughout the nation for their public service and educational contributions.

In this connection, may I not say that at the head of our instruction department we have in Dr. Henry J. Gerling one of the most outstanding superintendents of the nation. He is a man of superior scholarship, a member of the bar, a business man, a student of educational policies and methods, and also an accomplished administrator who knows how to carry theories of

¹This paper was prepared for the Conference of School Board Members, N.E.A. Convention, Atlantic City, June 24, 1932.

education into practical realities. Humane in his attitudes and effective as an executive, he has acquired the confidence of the entire community.

Through the safeguarding provisions of the law, the schools of St. Louis have always been operated on a conservative basis of economy. Debts cannot be contracted by the board and only one bond issue, amounting to three million dollars, has been authorized. This small issue, made necessary by the conditions of the late war, is in the process of rapid liquidation. These facts are mentioned not so much to single out the schools of St. Louis, but to emphasize the point that no school system unsupported by adequate legislation can operate efficiently in the interests of the public.

The Satisfactions of Board Membership

Members of the board of education in part discharge their duty in proportion to their interest in the faithful application of the law and also in efforts to secure its modification where necessary. Service on the school board is a stimulus to thought and a challenge to action.

In conclusion, I wish to say that a good school-board member, although receiving no salary, is paid in terms of achievements if he prizes the opportunity to render a worth-while service to the public. No function of the government under which we live is more important than that of educating the children of the rising generation. The founders of our government assumed that an educated citizenship would be necessary for the continuation of its success.

Early land grants for public schools, definite provisions in state constitutions for a free and universal education, and the legal enactments by the states, as well as by the Federal Government, are testimonials to our faith in education and to our belief in the equality of opportunities.

The board member who sees himself as a representative of the people, chosen by the people to help realize our vision of universal education for all citizens, holds a responsibility which is more than that of a position. He who invests his commission with the mandate to render an accounting of his stewardship before an enlightened educational and social tribunal may hope to merit a verdict of worthy membership on the board of education.

Localism, an Educational Weakness

D. H. Cook, Philadelphia, Pennsylvania

Employment is the greatest problem of the day. Employment meets unemployment and its obstacles at every turn of the road.

The selection of teachers is more than a question of employment for it affects the future life of the child. The conflict between state and local authorities in school government continues to be a problem, whether the times are good or bad. We favor as much of local option as the situation may justify. However, the practice of engaging teachers who live in the community or near by is becoming a weakness and the practice of treating teachers' positions as jobs should be challenged.

The first consideration is not only the welfare of the family and of the state, but of the children as citizens of the future. While all sympathize with the local teachers who are in distress, we should understand well that no dollars should be added to the pockets of those who would buy daily bread, if the dollars are to be withheld from helping the lives of the children who have a mental and moral need that is greater than physical distress experienced by local teachers who demand employment simply because they are local. We call this weakness Localism. A well-trained teacher may be the best one for her home school. Generally she is not, for inbreeding in education is not best. Localism is establishing a precedent to hire because of residence or financial need of the candidate. It disregards the great fact that our children are our first obligations, both at home and in government. This lesson was taught us two thousand years ago and is the corner stone of our national program.

We have just completed the destruction of sectionalism and we are proud to say to the world that there is now neither North nor South, nor East, nor West in America. Our country has become one and united — indivisible. It has taken years of struggle to dissipate the nightmare of sectionalism. Long ago we outgrew provincialism but Localism takes us back to that early period when a community thought only in terms of itself and its little world.

The practice of Localism in education has retarded educational efficiency at least fifty years or more, especially in rural districts. Even city boards of education are passing resolutions making ineligible any teachers who are not residents of the community or county and almost insisting that candidates preferred are those who pay tribute, in tax or vote, to their local authorities.

Even by-products of this short vision or mental blindness are threatening us. We are told that certain counties and communities are not

only limiting their appointments to those who live near the school, but they are accepting money as pay for such appointments. Without question a few of the progressive northern states are permitting county and local authorities to advertise for the lowest bidders for the positions now open in their schools. How great the price for such a weakness and how great the penalty inflicted upon the children? How great the waste of the pocketbook? Time will soon tell.

Thousands of teachers are wanted at this writing, but apparently the only ones to be considered are those who have been sufficiently unfortunate to settle at home and to be in need.

The effects of Localism are being felt everywhere in public and private schools and colleges. This influence is spreading as a result of the depression. In every corner of the land teaching positions have been abolished, salaries cut, work doubled, and supervision reduced. This has happened at a time when education is compelled to bear new and larger burdens for the sake of the children who are to become our future citizens.

The depression is man-made and its only sure cure is through the mind tonic that comes through learning and culture. As the school, so is the nation. As the teacher, so is the school.

As suggested, school authorities have made teaching positions so difficult that it would be almost a miracle to find suitable or ideal teachers needed, especially when the teacher's burdens have been vastly increased, even doubled, by abolition of positions, combinations of work and cuts in salary. That the children may have the best teachers who are to work under these new and difficult conditions, teacher-placement is more than ever a question of search and research and it is a scientific service.

Projects like the following need the best there is in teacher placement:

A small-city school needs one teacher to supervise and teach instrumental and vocal music, who can also teach two classes of manual training and one class in physics. This is a state vocational school; hence, the teacher must possess a vocational certificate.

A junior college in a southern state needs a woman with a master's degree in English who will serve as assistant matron. This same institution requests a teacher for Greek who must handle voice or expression, and if possible teach some commercial subjects.

A northern state is in need of teacher of home economics, general science, biology and music.

Another state is searching for four teachers who can carry the four special subjects, music, art, physical training, and home economics, each to be combined with an academic subject. This school has abolished its four special positions and hopes to find a teacher for each of them who can carry a double load.

A college wants a man, Ph.D., to head a new department of business administration and to act as college coach in athletics.

A village school must have a teacher to supervise vocal and instrumental music in the eight grades and have training for teaching fifth and sixth grades English, penmanship, spelling and art.

If the foregoing positions are not filled by teachers who hold state certificates in all the subjects named, the state will not permit these various schools to receive the money that comes to them when a duly certified teacher is employed. This amount averages \$400 per teacher.

Volumes might be written to prove that teacher-placement is a science and one of the most technical services our democracy has encouraged to grow. Shall teacher-placement, both private and public, survive the troubles now being introduced by Localism? In reply, we might as well argue that doctors and lawyers are not needed because the depression has restricted their income and reduced the number of their calls. Superintendents and school boards who have the needs of the pupils and students at heart will not permit such a service to be weakened nor to suffer because of lack of patronage.

Teacher-placement is as important as teacher-preparation. It begins where formal professional education ends and its goal is to serve the student, the home, and the community. Yet, so long as schools close their community gates against the coming of the teachers who are suited to do well all the work required in each of the thousands of difficult positions now open, teacher-placement as a science has no way of helping education to strengthen itself. The depression has created the need for even better teachers and still better ones, because the times have made new problems and there are political, financial, and human diseases to be remedied only through the school and Education.

Good teachers are not in great abundance. There is no oversupply in many fields of teaching. The best teachers have been continuing their training and have prepared for these days of peace and reconstruction. The supply of good teachers is sufficient, were they properly distributed. Distribution in this field, as in economics, is a national need.

No parent, even though needy and dependent, would hesitate to sacrifice even till it hurts, to give to his own the best in education. Then how can we vindicate the false economy of school authorities shown in the selection of unfit teachers whether local or otherwise?

America can be strengthened by those teachers who know how to train for leadership, but let us beware lest we "slay the camel that would bear us through the desert, because we will not endure a momentary thirst."

DOES HE MEAN ME?

Brooke W. Hills

It was at a dinner a few years ago, a farewell dinner, given by some of the men in the closely knit group of school administrators in our section to a member of the department who was leaving us to become Commissioner of Education in a neighboring state.

We were four at a table. A quartet recruited from others of our number, appreciated not so much for their good voices as because they were from our own people, had closed their program with "Beautiful Isle of Somewhere." Many speeches of congratulation and farewell had been spoken. Presentations had been made and accepted.

And now it was our own Commissioner saying good-by to his friend and associate, bidding farewell to the man who had lived and worked with him through epoch-making days to bring the state schools to the high pitch of efficiency they have reached.

He stood there before us, the man we affectionately called "Boss," a tired, worn man, talking half to us, half to his associate, his usually decided voice breaking up at times:

"And so I say good-by to you tonight, my dear fellow. Tomorrow and next month and next year I shall call you 'Mr. Commissioner of Education,' and show you the deference due you in your high position; but tonight I call you 'my dear fellow' as I bid you Godspeed, and wish you all good fortune in the work that lies before you."

One of our four cleared his throat and observed in a half whisper, "The Old Man takes this pretty hard, doesn't he?"

"He sure does," said another.

"Do you remember," said the first, "how he got after us when he first came into the state?"

One who had not spoken laughed shortly.

"I certainly do," said he. "Did I ever tell you fellows of the first conference he held down in our county? I guess this happened before a couple of you were in the state."

And as the meeting broke up and while little groups of men still lingered at the tables, he told us of an occurrence in the early days of the Commissioner's rule, the days when all four of us were just breaking into school administration. It seemed a long time ago as we sat there that night.

I remember, he began, the postman came that particular Saturday morning while my wife and I were eating breakfast. She glanced through the mail before handing it to me.

"Anything important?"

"No, I guess not," she replied. "Oh, wait a second; here's a letter from the new Commissioner inviting you to speak at a meeting over in Brunswick."

"Why not?" I smiled. "Probably he wants to make the meeting a success."

Yet, I don't mind telling you fellows, I was glad to receive the polite letter. A "frank discussion of your methods in improving teachers in service." That was what he wanted. And to a young man like myself, three years in a small superintendency, just beginning to see visions of promotion ahead to larger and better jobs with more money and more position, this invitation seemed to have possibilities. I could not help feeling flattered. Very likely, I thought, the Commissioner had heard of me. Possibly he might have me in mind for something good in the new program he was advancing in the state. You know how we all feel when we get a little recognition.

Like everyone else I was interested in this new Commissioner. You remember that was the year we had gone through a mighty trying time

The present story is based on an occurrence in an eastern state. The State Commissioner of Education who conducted the meeting and discussed the local superintendent, revolutionized the work in his state very much in the manner described.

—The Editor.

in the state. There had been a legislative investigation. Numerous questionnaires had been duly sent us and as dutifully filled out and returned. Then had come a delay of two or three months, followed by a drastic revision of school laws, and a more drastic reorganization of the whole scheme of state schools. In this the former Commissioner had been retired, and a new man, fresh from an important midwestern city superintendency, brought in.

Of course, I had wondered how far these changes would affect me, even in my own inconspicuous position. We had heard a good deal about our new boss. We had been told that he was not an office man, that he was always out in the field, always going through various systems, that one never knew when he might suddenly appear on the scene.

"He works everyone to death," said a close friend of the newcomer, in a remark repeated to me. "But he works no one any harder than he works himself. He is a bear for work."

The fact is, I already had reason to know first-hand that the new man was not always in his office. You know how the drive comes up in front of our main building. Well, one morning a big car had pulled in at the curb, a tall gray-haired man had walked up to the entrance, and a moment later he was introducing himself as the Commissioner.

He was pleasant enough. Said he heard I came from his college. Said he "was just looking around, getting acquainted." And then, "I'd like to go through your school. I wish you would show me the best teacher. Not *one* of the best; *the* best." Such was his request.

I hesitated.

"I know they are all good teachers," he observed. "Have you a first-class art teacher?"

Yes, thank goodness, we had. And as good fortune would have it, a large part of her recent exhibition was still on the wall.

I showed this to him with considerable pride. It was excellent work and I knew it.

But, then, "Yes, I agree with you; these crayons are very well done. But will you tell me how this teacher relates her work to the field of English?"

I couldn't, for the simple reason she didn't. This idea of the correlation of art with strictly academic subjects is a commonplace, nowadays, as you well know. But it was not, then.

He smiled a little at my discomfiture.

"Oh, well, you might look into this a little," he observed. "I think it has possibilities." And he was gone.

All this went through my mind as I read and reread his invitation that Saturday morning. Then and there I resolved I'd show him. I might not know very much about practical correlations of art; but I did know something, a whole lot, I believed, about building up a school system. Here was my chance.

I went to work. I talked over the subject with several of my school friends, with at least one of you, I remember. I received from them a number of valuable suggestions, and wrote out what I felt certain was a first-class paper. To show my training in my postgraduate work for a degree in the university, I incorporated in my remarks two or three significant passages from modern authorities. My wife agreed with me

that my statements read well and sounded well. Confidently, then, I awaited the day of the conference.

The invitation had stated that a number of speakers would take part. I had expected this, but I was very much surprised when the advance program appeared. Almost every superintendent and supervising principal in our part of the state was included. There was planned an afternoon meeting, then an evening session, to be followed the next morning by a half-day period. Evidently I was not the only person on the Commissioner's mind. What was his idea? To get us all to thinking, to put us all on our mettle, to bring us together where he could size us up in comparison with each other? I worried a lot about this, although I felt a little better when I found by careful inquiry that many of my friends were doing their share of worrying, also.

Well, as they say, came the day. I had located one man who was not on the program, Sherman Flynn. You all remember Sherm, that bright young chap who was at Eastfield a number of years ago. He and I planned to room together, and we met on the train.

"Got a good speech?" he pleasantly inquired as we shook hands. "I'm lucky; I don't have to worry. I know right now what the Boss thinks of me. Guess I'm the only distinguished educator not on the program. Oh, well, he will forget all about me, some of you fellows will be so punk. Cheer up; you'll have one friend in the audience, anyway."

I tell you, none of this was exactly calculated to relieve my disturbed state of mind. Here I was, placed on exhibition before a critical group, everyone scrambling for himself, many of these men grown old in the service. A tough place for a young man!

Nor was there much encouragement for me at the afternoon meeting. The Commissioner presided. He observed briefly that he was not there to waste time, and the proceedings started forthwith.

I shall not try to describe to you men any of the addresses I heard that afternoon, nor those given during the evening. It is enough to say that there was anything but a spirit of levity present. I will add that if there was any educational authority, living or dead, who was not quoted, I do not now recall the person thus slighted. In measured accents the processes of Education, all the way from Psychology to Theory and Management, were discussed and rediscussed, until the air itself seemed saturated with scholastic doctrines. I know I grew tired listening.

The evening meeting was adjourned at eleven o'clock with a short statement from the Commissioner that he was not yet ready to take part in the discussion. Evidently he was biding his time. A pleasant thought for me in connection with the next day's proceedings.

My friend was very cheerful when we had closed the door of our room.

"Did you hear what the Boss said?" he inquired with a happy smile. "Nothing worth while for him to take up yet. He must be waiting to hear your speech. Bet you he is just trembling all over to have the chance to listen to you. Guess there must be a whole lot to this educational business, after all. Now I can see why I made a mistake going into schoolwork. No brains, here! If only I were a heavy thinker like you!" and I could hear him chuckle as he turned off the light.

"Happy dreams!" he called out a moment later. "Oh, my, I can hardly wait for tomorrow morning!"

And off he went to sleep while I lay awake and worried over the approaching session.

If the meetings of the day before had been saturated with ponderous educational theory, this final program was even more so. Through it all the Commissioner sat with the same impassive look as before.

Finally, my own turn came. Sherm gave me an encouraging slap on the knee as I left my seat. And, then, for some reason, I never have known why, bored to death as I was with all the talk to which I had listened, there flashed through my mind George Ade's story of the tough school trustee who got up at Commencement to make a speech. You remember he found he had left his remarks home in the pocket of his everyday suit, and that having blandly informed his audience of his predicament, he proceeded to tell them, instead, exactly what he thought of the whole business.

So, a moment later, to my horror, instead of beginning my remarks with the significant statement, "If there is any one necessity in our educational scheme today, that of improving our teaching by improving our teachers in service is paramount," I heard myself saying, "The other day, while I was visiting one of our third grades, I heard the teacher tell the pupils of a very funny occurrence she had seen in a school where she had once taught."

And I told the story.

Rebelliously I looked at the Commissioner, expecting to see my death warrant written all over his face. Instead, to my amazement, I saw the flicker of a smile. I glanced at Sherm down in the audience. He was sitting up straight, regarding me with a look of the utmost surprise. So, also, were most of the other men.

In for a penny, in for a pound. I remember saying something to the effect that if teachers would try once in a while to see that the children had a good time in school as well as doing their homework, that usually it is easier to catch flies with a little molasses than with vinegar, and that if school administrators saw to it that the teachers had a heart for the children some of the time, probably the schools wouldn't be hurt very much and that better work would most likely be the result. My speech still in my pocket, I sat down in a miserable silence.

Done for, thought I. Why, oh why, had I committed this outrage? Why had I been fool enough to disturb the dignity of the occasion? How could I ever again expect to face my associates at home after perpetrating such a pedagogical atrocity?

Sherm leaned over and hissed in my ear as the next speaker went to the platform, "Well, you don't have to worry now whether the Commissioner will remember your speech. He sure will!" And I could hear him snicker as he folded his arms and resumed his former position.

So, down to the end of the list the program wended its dreary way. Through more educational profundities I sat there, wrapped in a heavier and heavier blanket of gloom. No, I didn't need to worry. My speech had made an impression, all right. The Commissioner wouldn't forget. Why, oh why . . .

As the last scheduled speaker took his seat the Commissioner rose to his feet.

"Gentlemen," said he, "I want to talk to you a little while. I want to tell you exactly what is on my mind. For nearly two days, now, I have been listening to a great deal of educational wisdom. I am much impressed with what I have heard. I have noticed with much interest that everyone here, apparently, except one of the last speakers, takes himself and his theories very seriously."

Here it comes, thought I. And Sherm gripped my knee again—"he means you, all right. Didn't I tell you he wouldn't forget?"

"Probably," went on the Commissioner, "this is as it should be. Education is no joke.

However, I do not want my young friend to feel that his remarks were out of place, that they were not appreciated, although couched in an unusual manner of speech. If the truth were told, I do not believe there are not many of you here who do not secretly feel as I do, that there is such a thing as taking oneself too seriously, that there is an occasional place for humor in any school gathering such as this, as well as at any other type of meeting. I agree that teachers should try to cultivate the human instinct."

I could hardly believe my ears.

"What?" thought I. "Why, this Commissioner must be human, after all."

And as my spirits bounded up, in turn I whispered to my friend,

"Sure, he means me! Now, what do you think of that?"

"But enough of this," continued the Commissioner.

"As you know, I have been visiting schools in the state since my appointment. I have been very glad indeed to make pleasant acquaintances among you men, acquaintanceships which I am sure will develop into warm, mutually helpful friendships, as we go along.

"I have met a supervising principal I want to describe to you. Possibly I should say a 'school administrator'—I do not want to be too definite. He made a decided impression on me when I visited his school, and my opinion of him has not changed; in fact, it has become even deeper seated as I have thought of him during these sessions. He is in the room. He is a man I shall not forget."

Everyone was listening in tense silence. The Commissioner's tone seemed more like a challenge for a self-appraisal than a statement.

"No," he continued as he warmed to his topic. "I shall not forget this man nor this type of supervisor. I found his school buildings clean, warm, and well appointed. It was evident that he takes a great deal of pride in the upkeep of the school plant. It is a fact that almost everywhere the most valuable possessions of a school district are represented in the school property. Buildings and grounds can and must be kept up. This man certainly takes care of the district's property."

I looked over at Sherm.

"He means you," I whispered. "I wish I had a couple of janitors for every building, the way you have."

"This supervising principal—or superintendent—backs up his teachers in discipline. He never listens to the parent's side of the question, only. He gives the teachers a fair chance, and they know it. He has the patience to hear the case through, and the wit to send his patrons away satisfied, usually with a smile."

Well, now, thought I; after all, he must mean me. Good enough!

"I looked over his records of punctuality and attendance. In the front hall, opposite his office, I saw a very carefully prepared statement, evidently issued weekly, showing the register record, room by room. It is obvious that he puts a good deal of time into this. He is to be commended for the results. Punctuality and good attendance are essential in any well-conducted school."

Yes, Sherm here has held the county record for two straight years. Well, I'm glad the Commissioner means him. And I really tried to keep back a disappointed feeling. I could see a warm glow of satisfaction on the face of my friend.

"This administrator is well liked. He belongs to many local organizations and is an officer in several. He is known to be sympathetic with the children. He attends their athletic games, is interested in sports and school clubs, and helped organize the County High School League. With his wife he often attends social functions of the schools; they are welcome there, they are wel-

come everywhere. And all this is as it should be. A schoolman must be a positive part, a desired part, not only in his schools, but in the Community, itself."

I felt Sherm's arm go around my shoulders and his glance was one of congratulation.

"Good for you, old man. You're the fellow he means. You deserve this."

But then, "Yes, he does all these things and more. His school records are models of accuracy and neatness. His reports to the state and his own school board are invariably correct, interesting, and are always on time. He administers his financial program sensibly and economically; his school costs are low, his budget requirements reasonable. His board considers itself fortunate to retain his services. In their eyes, in the eyes of his own faculty and students, in the opinion of his friends everywhere, he is a thoroughly competent, thoroughly satisfactory supervising principal."

There was a long pause. The Commissioner looked around the room and his glance seemed to take in every man there.

"But not so in my opinion! This man, with all the virtues I have enumerated and many I have not mentioned, is not a competent man for the simple reason he is paying little or no attention to his real job. He is not a school administrator; he is a business man in a school office. He is not a professional educator.

"Why? Well, what is the object of our public school system? In this state, it is defined by law: to give a thorough and efficient education to every child in the state. Whose business is it to see that this is being accomplished? The man who is hired for this purpose and given a title in accordance with the nature of his work—the supervising principal, or the superintendent, too, for that matter. How can he definitely know what his teachers are teaching thoroughly and efficiently? By depending on what he is told by his faculty, competent and honest though it be? By the inspection of records brought to his desk, accurate and thorough though they are? By mere calls of inspection in the classroom—a glance at the general order, a pleasant word for the teacher, a pat on the shoulder for some boy, an approving look at the homework of some fifth-grade girl?

"No, this man is incompetent, because in the most vital task of all he is either superficial or too easy-going. He stays away from the firing line; he keeps out of the trenches. He is too busy with relatively unimportant matters to pay attention to the real job. In plain English, he is a supervisor who does not supervise. He fools himself, he fools nearly everyone into thinking he is a competent man, a real administrator, a real educator. But not me!

"You will note, if you stop to think, that in all these discussions we have not heard one word said about classroom supervision. Why? You can draw your own conclusions. Gentlemen, this meeting is at an end. At the beginning of my remarks, I told you I had a certain man in mind. I suspect, nay, I am certain, that I have many such in mind. The next time we have such a gathering as this, I hope I shall hear at least more than one man among thirty mention visits to a schoolroom; at least one speak of the importance and real pleasure of the real work of a superintendent or supervising principal—the improvement of instruction by classroom supervision. In my future visits to your systems, I hope I shall find more records of personal observation of the work of teachers. It is my business as State Commissioner of Education to supervise the work of the schools of this state. I expect to do my share of this, and, very frankly, I expect it of you.

"Thank you for your patience in listening to a newcomer. I want you to know I am as anxious to make good in my position as you are

The Development and Present Status of the Six-Year High School

L. R. Kilzer, Professor of Secondary Education, University of Wyoming

In a discussion of trends in the reorganization of high schools, the Office of Education recently said: "The most convincing increase has occurred in the case of undivided, i.e., five-year and six-year schools. Their number more than doubled during the biennium 1926-1928. Losses occurred in only four states; no one of these states had any considerable number of such schools. Increases were distributed over 41 states, and were most pronounced in those states which in 1926 had the largest number of undivided schools. Four states (Indiana, Michigan, Ohio, and Pennsylvania) in 1926 had 356 undivided schools; these same states had a total of 558 undivided schools in 1928. In 1926 there were only four states (the ones already mentioned) which had 20 or more such schools; in 1928, 14 states had 20 or more such schools. The trends indicate that the undivided school will shortly displace the junior high school as the reorganized school most frequently found. The growth in the number of undivided schools is an indication that the reorganization movement is finding its way into smaller school systems. The junior and senior segregated schools have been developed principally in larger centers. Examination of the lists . . . quickly reveals that the undivided schools are located more often in smaller communities."¹

In 1928, the Office of Education had a record of 4,885 reorganized high schools; that is, high schools which due to a reorganization of units were no longer a part of a system having an elementary school seven or eight years in length followed by a four-year high school. Of this number, 1,201 schools (24.58 per cent) were undivided high schools. Of the undivided high schools, 32 schools (2.67 per cent) incorporated grades 6-11 (both inclusive); 52 schools (4.33 per cent) incorporated grades 7-11; 925 schools (77.02 per cent) incorporated grades 7-12; 103 schools (8.58 per cent) incorporated grades 8-12; one school (.08 per cent) incorporated grades 9-13; and 88 schools (7.33 per cent) were unclassified.² Undivided high schools including grades 7-12 were reported in all of the 48 states except Louisiana, Maryland, New Mexico, North Carolina, North Dakota, South Carolina, and Texas. Of the 362 reorganized high schools in Indiana, 228 schools (63 per cent) were undivided six-year high schools; of the 347 reorganized high schools in Michigan, 98 schools (28 per cent) were undivided six-year high schools; of the 372 reorganized high schools in Ohio, 123 (33 per cent) were undivided six-year high schools; of the 336 reorganized high schools in Pennsylvania, 76 schools (23 per cent) were undivided six-year high schools; and of the 167 reorganized high schools in West Virginia, 48 schools (29 per cent) were undivided six-year high schools; Oklahoma and Florida each reported 23 undivided six-year high schools; Alabama reported 28; and Kentucky reported 29 such schools.³

What is a Six-Year High School?

It is well to have clearly in mind the characteristics of the six-year high school, and to distinguish it from somewhat similar types of organization. In 1928, the Office of Education had a record of 1,480 junior-senior high schools.⁴ Cognizant of the fact that terms are frequently

¹Office of Education, Bulletin No. 20 (1931), *Biennial Survey of Education in the United States, 1928-1930*, Vol. I, Chap. III, pp. 2-3.

²It should be noted that two kinds of so-called six-year high schools are listed: one including grades 6-11, and the other including grades 7-12. The writer does not consider grade 6 a part of the high school, and therefore reserves the term "six-year high school" for undivided high schools incorporating grades 7, 8, 9, 10, 11, and 12.

³Ibid., pp. 4-5.

⁴Ibid., pp. 4-5.



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used loosely, the author wrote to Carl A. Jessen, Specialist in Secondary Education, Office of Education, for information. Mr. Jessen advised that a school which called itself a junior-senior high school was classified "junior-senior," and that one which called itself an undivided high school was classified "undivided." He said also: "Junior-senior usually means that both junior and senior units are housed in the same building. Sometimes the two units have separate principals; sometimes an assistant principal handles one of the units. Frequently teachers employed for one unit are not expected to teach in the other division. In other words, in the junior-senior high school there is likely to be a fairly evident break between the two units." Mr. Jessen gave the following characterization of the undivided high school: "In the undivided schools the integration is usually more complete. English teachers, for instance, are assigned to instruct classes at any grade level. Quite uniformly there is only one administrative staff. Department heads and other advisory officers are generally responsible for their assignments at all grade levels. The progress of pupils is from grade to grade but not from unit to unit."

To the writer, a six-year high school has the following characteristics:

1. It incorporates grades 7 to 12, inclusive.
2. It has only one administrative staff.
 - a) If there is an assistant principal, he is responsible for his duties throughout these six grades.
3. Advisory officers, department heads, and classroom teachers are responsible for their assignments at all grade levels 7-12.

4. Pupil progress is from subject to subject and from grade to grade rather than from so-called lower to so-called upper division.

Buildings must be adapted to the six-year organization. When the pupils of all six grades are housed in the same building, it is wise to separate the pupils of the so-called lower division from the pupils of the so-called upper division by means of wings or floors of the building. If two or more separate buildings are used to house the undivided six-year high school, these buildings should be as near each other as possible in order that pupils, administrators, advisory officers, department heads, and teachers may lose very little time in going from building

to building. Sometimes a closed corridor joining the buildings is feasible.

Development of Six-Year High School

It is very difficult to trace the development of the undivided six-year high school. In the seventeenth century, Comenius urged that the school life of a child be divided into four periods. Instruction at the mother's knee was to take place during the first six years of life. The second period, from the age of 6 to the age of 12, was to be devoted to the Vernacular. The third period from 12 to 18 was to be devoted to the instruction in the Latin School, and the fourth period, from 18 to 24, was to be devoted to training in the College of Light. The third period corresponded in many ways to the six-year high-school area.

The first Latin Grammar School in America was established in Boston in 1635. It has been maintained on the six-year basis almost without interruption since that time.

The main movement for the reorganization of the American public-school system began during the last two decades of the nineteenth century. President Eliot, of Harvard, was probably the first outstanding American exponent of the six-year high school. At a meeting of the Department of Superintendence of the National Education Association in 1888, he voiced the opinion that eight years is too long a time to devote to elementary education. In 1892, the Committee of Ten of the National Education Association, with President Eliot as its chairman, urged that the secondary-school period should begin two years earlier than was common in the traditional organization, and that the elementary school should, therefore, cover six years instead of eight. Various other influential committees from time to time have advocated the six-six type of organization.

Early Reorganization Efforts

Early efforts at reorganization in the United States aimed at the single six-year high school rather than at separate junior and senior high schools of three years each. In 1894, the Chicago school system was organized so that the pupils who had completed the sixth grade of the elementary school could enter the six-year college-preparatory course. This plan was abolished after a few years. Providence, Rhode Island, made a somewhat similar provision in 1898, but abolished it the following year. Saginaw, Michigan, reorganized on the six-six basis in 1898, but abandoned the plan after a brief trial. During the first decade of the twentieth century, Ithica, New York, gradually adopted the six-six plan. In 1909, a committee of the Department of Secondary Education of the National Education Association said: "The sentiment for the six-and-six division is growing. . . . In some cities six-year courses in high school have been in vogue for several years."⁵

The first reorganized high school resembling closely what is now considered a segregated junior high school was established in Berkeley, California, in 1909. Several other cities soon established such schools. For many years following the establishment of the segregated junior high school in Berkeley, this was the most popular type of reorganized high school. This was especially true in the case of cities that had a sufficient number of pupils to justify a division. Many small school systems attempted to foster the segregated junior high school, but usually found the plan unwise.

By means of a questionnaire dealing with the reorganization of secondary education, the Of-

⁵National Education Association, *Addresses and Proceedings* (1909), p. 499.

Office of Education obtained from all of the 48 state departments of education information which was corrected to December, 1925. It was found that the state departments of education in 20 states at that time favored the six-six plan for smaller systems. These states were: Alabama, Arkansas, California, Connecticut, Florida, Indiana, Kentucky, Maine, Massachusetts, Michigan, New Hampshire, New York, North Dakota, Ohio, Oregon, Pennsylvania, Washington, West Virginia, Wisconsin, and Wyoming. It was found that Alabama, Indiana, Kansas, Kentucky, Maine, Michigan, Missouri, New Hampshire, New York, Ohio, and Wyoming had set up definite standards for six-year high schools.⁶

Most Recent Growth of Six-Year Schools

Shannon recently found 258 six-year high schools in Indiana. The number has increased from none to 258 over a period of 10 years. Approximately half of these were rural commissioned high schools.⁷

In a single county in Ohio, Cuyahoga county, there were 17 six-year high schools in 1929. The directory of the state department of education in Iowa for 1929-30 shows that 56 high schools in that state were listed as six-year high schools that year. These 56 high schools were located in places which were strictly rural as well as in cities up to 13,500 population. The Western Hills High School was established as a six-year high school in Cincinnati, Ohio, in 1928. In 1928, Cleveland had 13 high schools, eight of which were six-year high schools. Perhaps the largest high school of this type in operation at this time is Collinwood High School in Cleveland, Ohio. It was established recently, and enrolls over 4,000 pupils. It is apparent that six-year high schools have been established in very small systems and in very large ones.

The *North Central Association Quarterly*, for June, 1932, shows that 381 schools (16.0 per cent) of the 2,387 high schools accredited by that association in 1931-32 were reported as six-year high schools. The secretary of the association says that strong evidence indicates that a number of the high schools organized as six-year high schools reported as four-year high schools. It is probably true that there were more than 381 six-year high schools among North Central high schools in 1931-32. In Arkansas, 32 schools (46.4 per cent) of the 69 North Central Association (N.C.A.) high schools were six-year high schools; in Ohio, 97 schools (32 per cent) of the 303 N.C.A. high schools were organized on this basis; in West Virginia, 26 schools (29.2 per cent) of the 89 N.C.A. high schools were six-year high schools; in Arizona, Michigan, Indiana, and Wyoming the percentages were 27.8, 24.2, 23.6, and 21.4, respectively. Six other states (among the 20 N.C.A. states) reported between 10 and 20 per cent of their N.C.A. high schools organized as six-year high schools.

The 1930-31 list of secondary schools approved by the Association of Colleges and Secondary Schools of the Southern States includes 107 undivided six-year high schools. In Florida, 43.9 per cent of the high schools in this association were six-year high schools; in Kentucky, the percentage was 25.3; in Tennessee, it was 12.3; in Virginia, it was 6; and in North Carolina, it was 5.2. No other southern state had over 2.7 per cent of its association high schools organized on the six-year plan.

Limits of Six-Year School Efficiency

Additional data might be assembled readily to indicate the present status of the six-year high school. Attention has been called to enough data, however, to make it clear that the number



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Dr. Stevenson, who has assumed the principalship of the Peru-La Salle Township High School, now heads the largest township high school and junior college with the broadest educational program of such an institution in the United States. Dr. Stevenson was born at Muskegon, Michigan, in 1885, and received his Doctor's degree from the University of Michigan. He has been a high-school principal and superintendent of schools in Kentucky, Michigan, and Iowa cities, and at the time of his appointment was a research assistant in the College of Education at the University of Michigan.

of six-year high schools is increasing very rapidly; that these high schools are found in various parts of the United States; that both small and large school systems have been reorganized on this basis; and that many high schools on the lists of such accrediting agencies as the North Central Association of Colleges and Secondary Schools are organized on this basis.

It is logical to ask: When should the segregated junior and the segregated senior high schools rather than the undivided six-year high school be organized? Unfortunately there is no definite answer to this question. A few authorities have indicated tentative answers, however.

The superintendent of the Cuyahoga county, Ohio, schools, after several years of experience with both the segregated junior high school and the undivided six-year high school, said "It seems impracticable to discuss the junior high school as a separate organization for small communities. Experience indicates that a six-year high school, grades 7-12 inclusive, is more efficient educationally and more economical financially, until the enrollment in the six-year high school reaches at least 600. At this point a division may sometimes be made profitably."⁸

Davis places the minimum number of pupils necessary in grades 7 to 12 to justify segregated junior and senior high schools at 500.⁹ Spaulding, after a survey of small junior high schools in Massachusetts, concluded that any school enrolling fewer than 50 pupils per grade (300 in grades 7-12) should use the six-year organization.¹⁰

If the foregoing recommendations are valid, the undivided six-year high school meets the need of the great majority of the communities of the United States. During the year 1925-26, it was found that 34.1 per cent of the American public high schools enrolled fewer than 50 pupils; 26.4 per cent enrolled from 51 to 100 pupils; 60.5 per cent enrolled not over 100 pupils; and 78.3 per cent enrolled not over 200 pupils.¹¹

In practically every investigation of the small high school or of rural education made in the past few years, the six-year high school has been recommended as one of the solutions for the problems discovered. The depression of the past few years has given impetus to the reorganization of many high schools on the six-year basis, especially in small school systems.

NOTE: In forthcoming issues of the *JOURNAL* the author will discuss "The Advantages and Disadvantages of the Six-Year High School" and "Introducing the Six-Year High School."

⁶Yawberg, A. G., "The Advantages and Disadvantages of the Junior High School in Small Urban Communities," *Official Report*, Department of Superintendence (1929), pp. 219-20.

⁷Davis, Calvin O., *Junior High-School Education* (World Book Company, 1924), p. 12.

⁸Spaulding, Francis T., "The Small Junior High School in Massachusetts," *Harvard Studies in Education* (1927), p. 9.

⁹Office of Education, Bulletin No. 13 (1930), *The Smallness of America's Rural High Schools*, pp. 6-7.

Operating a School-Renovation Program Through Welfare Assistance

Le Roy Woods, Superintendent of Schools, Mansfield, Massachusetts

During the first half of the year 1932 about 60 persons in the town of Mansfield, Mass., applied for welfare assistance. The town manager found it rather difficult to supply employment for all these men, and accordingly offered a certain number of them for work in the Mansfield schools. Through the coöperation of the school department, the town manager, and the select men, the schools were able to secure the services of 15 men for practically all of the working days between February 1 and July 31, 1932. Among the men supplied to the school departments were carpenters, plumbers, masons, painters, and laborers.

A careful program of renovating the school buildings was set into motion. The value of the work done has been conservatively estimated at \$10,000. Of this amount, \$2,000 was expended by the school department for equipment and supplies, such as paint, varnish, oils, cement, tools, and brushes. In other words, the school department has had the benefit of \$8,000 worth of skilled and unskilled labor through the welfare department and without cost to the schools.

The repairs and renovations in the Mansfield school buildings made possible by this welfare assistance could not have been undertaken by the school committee in less than five or six

years because the town would not ordinarily vote appropriations necessary to cover the cost. The town is relatively small, having a population of about 6,300. The annual school appropriation for 1932-33 is \$102,000, which is just enough to cover the salaries of teachers, janitors, and other help and to pay the necessary cost of coal, electric light, telephone, and administration and supervisory expense. Had it not been for the welfare assistance no repair could have been undertaken in the school buildings this year beyond the bare necessities. Out of the depression period has come a great gain to the schools. There seems to be no reason why other towns and cities could not profit similarly in having their schools repaired by men who would otherwise receive a dole or public grants for food and rent.

The first step in a boy's education is to teach him to observe. Under the direction of a skillful instructor, many qualities of the things around him, which had escaped notice, will be added to his knowledge, and all his former impressions will acquire an unaccustomed distinctness and precision. — Bache.

⁶Bureau of Education, Bulletin No. 28 (1928), *The Rural Junior High School*, 79 pp.

⁷Shannon, J. R., "An Unexploited Opportunity in the Six-Year High School," *School Review*, 36:745-56, December, 1928.

An Index of Holding Power for Adult Evening Schools

Roland M. Miller, Sacramento, California

Those responsible for the administration of adult evening classes are familiar with the problem of irregular attendance. Since state and county aid for evening schools are allocated according to average daily attendance in many states, the problem is one that strikes at the very vitals of the evening-school program; namely, its financial support.

In the absence of data on which to base more adequate analysis, two general reactions have existed toward the problem among administrators. One, a fatalistic attitude, finds explanation in certain characteristics of adults as students. Their attendance is not compulsory and the distracting interruptions of business cares, family cares, and social cares cannot be helped. The other, a straw-boss attitude, devises methods for forcing the instructor to keep his class membership sufficiently interested to come regularly. Attendance charts are exposed in the office; students who dropped from class are queried as to reasons; classes whose attendance shrink to a given point are abandoned — these and other methods are used to impress upon the instructor his responsibility for holding his class. Having done all this, the administrator's conscience is clear on the assumption that whatever the nature of the causes may be, he has done a great deal toward forcing better results.

Doubtless an attitude quite different from either of the above might well be taken if more information were available regarding the nature of the problem. At all events it would seem much more scientific to seek a broader foundation of fact on which to base judgment. This in turn necessitates standards by which experiences far and wide may be shared and compared. It is in the spirit of promoting such standards and analyses based thereon that the writer presents the following data, rather than in any sense assuming to present final solutions.

The Situation Studied

A brief sketch of the situation, out of which the data presented were drawn, may add meaning to the tabulations used. The evening school under discussion is a high school that gives credits in but few cases and these in coöperation with the senior day high school. Practically all the students are adults who do not attend for credits. The city has a population of 100,000; has six junior high schools, four being housed with elementary schools. It has one senior high school, a junior college, a continuation part-time high school and a center for adult day classes for women, in addition to the evening high school. The evening-school year comprises 34 weeks and is divided into three terms with logical breaks at Christmas and Easter.¹ No registration nor tuition fees are charged.

It is clear that the motive for attending the evening high school is but little affected by the desire to get a diploma, and unaffected by a desire to benefit from a fee that has been paid.

¹Record forms for the current year are devised to make all reports cumulative for the entire year. Old students carry on without re-registering at the beginning of the second and third terms. Class rolls carry through the year or for the duration of the class. The only motive for holding to the old tradition of "terms" is that a certain fresh start may be made either with new classes or new additions to old classes. Adult students find it difficult to hold the distant objectives of a year course, whereas the nearer goal seems more definite and is not such a strain on perseverance.

The observance of terms or semesters with respect to the organization of the work of a course has a valuable effect on instructors too. With the goal of a year ahead and lots of time to go, instructors are tempted to circumnavigate their subject and impair that refreshing sense of imminent accomplishment that causes the student to feel that he is going somewhere rather promptly.

TABLE I. Holding Power in an Evening Adult School
Cumulative by Weeks

Number of Week	Percentage of Total Registration Dropped. "Cumulative"	Percentage of Total Registration Retained. "Cumulative"
First Term		
1.	.....	.....
2.	.....	.....
3.	.....	.....
4.	7.30	92.70
5.	11.60	88.40
6.	13.20	86.80
7.	14.95	85.05
8.	23.	77.
9.	25.54	74.46
10.	28.8	71.20
11.	32.24	67.76
12.	31.86	68.14
13.	34.	66.
14.	39.95	60.05
15.	37.45	62.55
16.	40.52	59.48
17.	40.30	59.70
Second Term		
1.	.....	.....
2.	2.78	97.22
3.	2.94	97.06
4.	8.00	92.
5.	13.58	86.42
6.	15.73	84.27
7.	22.31	77.69
8.	25.27	74.73
9.	28.64	71.36
Third Term		
1.	.....	.....
2.	1.84	98.16
3.	4.44	95.46
4.	10.40	89.60
5.	14.41	85.59
6.	18.37	81.63
7.	21.20	78.80
8.	24.97	75.03

The school is, therefore, deprived of the stabilizing effect on attendance arising out of these considerations. Preparing for examinations such as various civil-service and naturalization examinations, which do not come on "the last day of school," also affect the "percentage of survival" adversely. Taken all in all, the school under consideration is probably typical of a large number of evening adult schools in the United States.²

What is Holding Power?

The holding power of an evening adult school is an attendance problem, although it has to do with discontinued attendance rather than with regular attendance.³

Some shrinkage during the year is to be expected, but a few significant questions might well be asked. How much shrinkage occurs in adult classes throughout the country? What percentage of shrinkage marks a school as weak or ineffective? What measuring rods can be established and what standards can be approved whereby administrators may classify schools in the matter of holding power?

For the purpose of inquiry the following table is presented. It is based on computation made for the year 1930-31. These are the records of the school taken as a whole and do not touch the question of regularity of attendance in individual classes.

The adult student is constantly weighing each hour spent in evening school with the possible use of that hour spent elsewhere. Even when the instructor has been able to "sell" his course to the student certain temporary conditions constantly arise which throw their weight in the balance against the class. A stormy evening, a civic lecture, a circus, or any of a number of events of interest to large numbers in the community make their influence felt on the evening-school attendance.

The line of distinction between the two will depend on the administrative device adopted for defining and discarding inactive registration cards.

In order to distinguish between active and inactive registrants a somewhat arbitrary rule has been adopted by which student cards are "dropped." On three consecutive absences from the class the instructor marks the attendance card, "drop." This card is taken from the class roll and the registration card, on which all classes taken by the student have been listed, is marked accordingly. When the student has been dropped from all classes for which he has registered, his registration card is deemed inactive and removed from the active file.

In order to arrive at the percentage of drop-outs and the percentage of survivals, by weeks, the following formula is used.

$$\text{Percentage dropped} = \frac{\text{Total number of inactive students}^*}{\text{Total registration}^*}$$

$$\text{Percentage retained} = \frac{\text{Total number of active students}^*}{\text{Total registration}^*}$$

*Cumulative by weeks.

It will be readily seen from Table I that such a statement as, "the holding power of Evening School X is 70 per cent," is not only misleading but meaningless. The 70 per cent may have been found by a careful count, but it only has significance if it is accompanied by a statement as to when the count was made. If the survival was 70 per cent at the end of the eighth week, it would obviously be something less at the end of the fourteenth week.⁴

Why Comparisons Are Difficult

Comparison of survival percentages is also subject to another disturbing factor. Students may be considered dropped on three consecutive absences, or because they were absent during the week prior to the report,⁵ or they may be kept on the roll long after they have ceased attending. Vast differences in "survival power" will occur in accordance with the basis used for distinguishing the active from the inactive. No standard practice exists by which an active registrant is defined. Until such a standard is adopted, no gauge or measure of survival can have value for comparative purposes.

Another important factor in the study of holding power of adult evening schools is the fact that many students finish their work before the end of the school semester or year. These cases are of two general kinds. First, certain short unit courses may run for a given number of weeks, the time being determined by the nature of the course and the demand for it, without regard to the date for closing school. Attendance figures for the school drop sharply at the time these classes end.⁶ Second, many students come to evening school to accomplish a certain piece of work, such as to prepare for a civil-service examination, to learn to print

²Due to the fact that each term is treated separately, the survival ratios for the second and third terms are vastly different than they would have been had the record been continuous and cumulative for the entire year. Because it is a common practice to register at the beginning of each semester or term, Table I is typical.

³This method is in wide use; e.g., Los Angeles Survey of Evening High Schools, as of the week ending October 24, 1930.

⁴Where registration records are kept on the term or semester basis, a 10-week course, in chemistry for laundries, for instance, might start late and extend into and end somewhere in the second term, thus making for a higher attendance record in the first term, and a lower attendance record in the second term. Cumulative records for the year would give a more accurate picture of the situation.

certain kind of script for posters, to gain proficiency in mathematics, as used by plumbers, etc. Having finished, they drop out, with a resulting decrease of the school's "survival."

Unless such circumstances as the foregoing are taken into account in deriving an index of holding power, such index will give a false impression and militate against the good record a school may have rightfully earned. No school should be tacitly penalized because adult students come and get what they want in less than 33 or 34 weeks of the school year. On the contrary, the presence of short-unit courses in the curriculum of an evening school is a good indication that the school has grasped the nature of its function and is alive to the more progressive methods of rendering its educational service.⁷

When Students Complete Courses

It seems evident, then, that survival ratios should be corrected for this item of the "finished students."⁸ This may be done by adding to the active enrollment each week those drop-outs who have "finished," thereby giving a figure representing all students whom the school has definitely served during the year plus those whom the school is still serving. The ratio of this figure to the total registration gives a kind of index of attendance efficiency which might be called an index of effective attendance.⁹

The following table illustrates the point under consideration.¹⁰ It will be noted that there is a material difference between the percentages in Columns 7 and 9. Column 7 gives a percentage of attendance which is generally taken as indicating "holding power" of evening schools. This is the figure that is obtained by cross-section studies which are made of evening schools in various cities from time to time.¹¹

⁷Short-unit courses are appropriate for certain subjects. The opening date of the class is well advertised. All the class is enrolled at the beginning. Students work together through the unit and the class is definitely closed on a given date. There may have been six, ten, or fifteen meetings. The time is short and the objectives of the course are clear and soon reached. Any clouding of the goal by removing it too far into the future, takes heavy toll from adult classes.

On the other hand, a large part of the curriculum of an evening school must be organized in such a way that students do not have to enter on a certain opening date. A continual ebb and flow of people in and out of an evening school is a normal phenomenon. Adult students also vary with respect to previous training and ability and cannot be held together throughout a term or year. Heterogeneity characterizes the typical adult class. Some form of individualized instruction, therefore, is necessary. Accordingly, courses may well be organized into definite units, and students allowed to travel at their various rates of speed through these units of the course. In addition to the usual objectives of the course, the various units will have proximate objectives, which will contribute to maintain the student's interest and therefore his attendance.

The fact that cases of "finished" work appear so early in the table (i.e., fourth week) is due to the fact that this classification includes such items as people who have moved out of the community, are seriously ill, or who have taken jobs which interfere, etc.

⁸This is, in reality, a cumulative index of the extent to which the school is discharging its functions. If the people who are merely visitors are registered, the index will be lowered accordingly.

⁹The figures are for the same school as those in Table I but represent the first term of the school year 1931-32. Students whose cards had been dropped were contacted by telephone each week and asked their reasons for leaving. The answers were classified. All those deemed "finished" were added cumulatively as in Column 3. It is beyond the scope and purpose of this paper to discuss the interesting reasons given for quitting evening school. Due to the difficulty of promptly contacting students without telephones, a large group designated "no telephones" was carried in the figures each week, introducing an error into Table II to the extent that this group included those who would have been "finished" were the facts known. Students without telephones may be contacted by return post cards on which they check their reasons for absence from a list printed on the card.

¹⁰For example, Los Angeles Evening School Survey, 1930. As of the eighth week of school the average survival percentage was 73 per cent. Studies such as these disregard those students who had "finished" prior to the survey.

TABLE II. Attendance Indices for an Evening Adult High School

I Number of Week	II Active Registration	III Inactive Registration Finished	IV Inactive Registration All Others	V Total Registration	VI Per Cent Dropped	VII Per Cent Survival	VIII Active and Finished	IX Per Cent Efficiency or Index of Effective Attendance	X Per Cent Loss or Index of Ineffective Attendance
1. . . .	1,145	15	41	1,418	1.06	98.94	1,403	98.94	0.00
2. 1,145	15	41	1,552	5.55	94.45	1,511	97.35	2.65	
3. 1,403	55	73	1,688	7.58	92.42	1,615	95.67	4.33	
4. 1,466	86	141	1,777	12.78	87.22	1,636	92.06	7.94	
5. 1,560	108	206	1,870	16.78	83.21	1,664	88.98	11.02	
6. 1,550	123	241	1,943	18.73	81.27	1,702	87.59	12.41	
7. 1,556	156	270	1,994	21.36	78.64	1,724	86.46	13.54	
8. 1,579									
9. 1,568									

In the matter of attendance it is obviously fair to give the evening school credit for those who have finished their work as well as for those still in attendance. Any search of inadequacy of holding power must be made in the drop-outs representing incompletely completed work, i.e., the reciprocal figures in Column 10, which might be called an index of ineffective attendance.

This index stands for people who have slipped through the fingers of the school, or people whom the school has not been able to impress, either because it did not offer what the adult was seeking, or offered it in a way that did not strike the fancy of the student. There is a certain modicum of irresponsible and fickle educational "shoppers" over whose loss we need not feel too badly, but the loss of the more serious and discriminating is a vital challenge.

A Final Cause of Shrinkage

There is another cause for shrinkage which should be distinguished. It arises out of the mere mechanics of the device used for measuring this shrinkage. Temporary absences due to many causes, such as illness, vacations, or intermittent work, give rise to a group of drop-outs who are "returning." Whatever devices may be used as the basis of calling students "inactive," some students will be found so classified, who on inquiry, signify their intention of returning. Over a long period of time, such as a year, this figure tends to settle into a characteristic constant, the ebb and flow of which affect but slightly comparisons of the week-to-week indices. Or in other words, a cumulative index is probably not seriously influenced by this item, after the first three or four weeks.

Clearly some of the causes for shrinkage are beyond administrative control. But many a director of adult evening programs would like to know what percentage of loss is defensible. This cannot be determined to any great degree of satisfaction until some standards are set up. These standards, like those developed in other fields, await analysis based on a wide range of experienced data.

Should the "index of effective attendance" or a similar index prove valuable as a uniform device for recording and reporting attendance, by a sufficiently large number of evening schools,

some idea might be gained as to what is the average or "normal" experience for evening schools of various types. "Normal tables" might emerge which could be used by the administrator in his efforts to evaluate the effectiveness of his school insofar as attendance could furnish evidence.

NEW YORK SCHOOL BOARDS MEET IN BUFFALO

The Associated School Boards and Trustees of New York state will hold their regular annual meeting at the Hotel Statler, Buffalo, on October 10 and 11. The program committee has announced a fine program for the meeting which will be of practical value and interest to all board members at this crucial time.

During the meeting there will be a discussion of the proposal to affiliate with the Associated Central Rural School District Boards. This affiliation is expected to bring all boards of the state into one strong organization, which will make the association of greater service to its members.

There will be some fine exhibits of school-building and equipment material. A representative of the statistics bureau will be present to give information about statistical reports and the distribution of state school money.

The Program

Maintaining Educational Efficiency and Reasonable Economy Under Present Economic Conditions—Dr. George D. Strayer, Teachers College, Columbia University.

How Can School Resources Best Be Used in the Service of the Unemployed?—Mr. Robert T. Hill, Council of Employment Service Bureau, New York.

Wise Handling of Ability Grouping in Village and Rural Schools—Mr. Edward M. Parrott, President Lake George Board.

Training Children in School for Helpful and Intelligent Community Life—Judge G. W. Cheney, Cornell, N. Y.

How Far Would Changes in the State Education Law Help the Present Economic Emergency?—Herbert S. Weet, Superintendent of Schools, Rochester, N. Y.

Can Our Schools Train Children for Helpful and Intelligent Community Life?—Theodore Zornow, Rochester, N. Y.

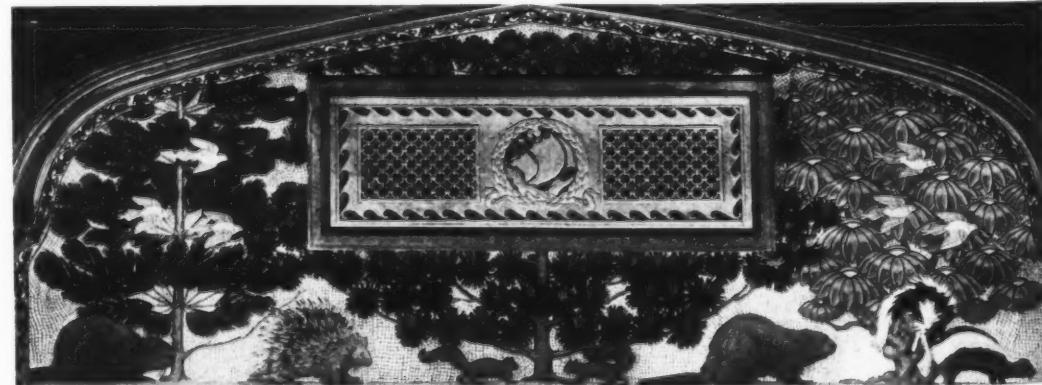
Reducing and Handling Student Failures—Dr. Chester Pugsley, Teachers College, Buffalo University.

Do Rural Schools Fit Children for Rural Life?—Thur Smith, President Central Rural School District Boards Association.

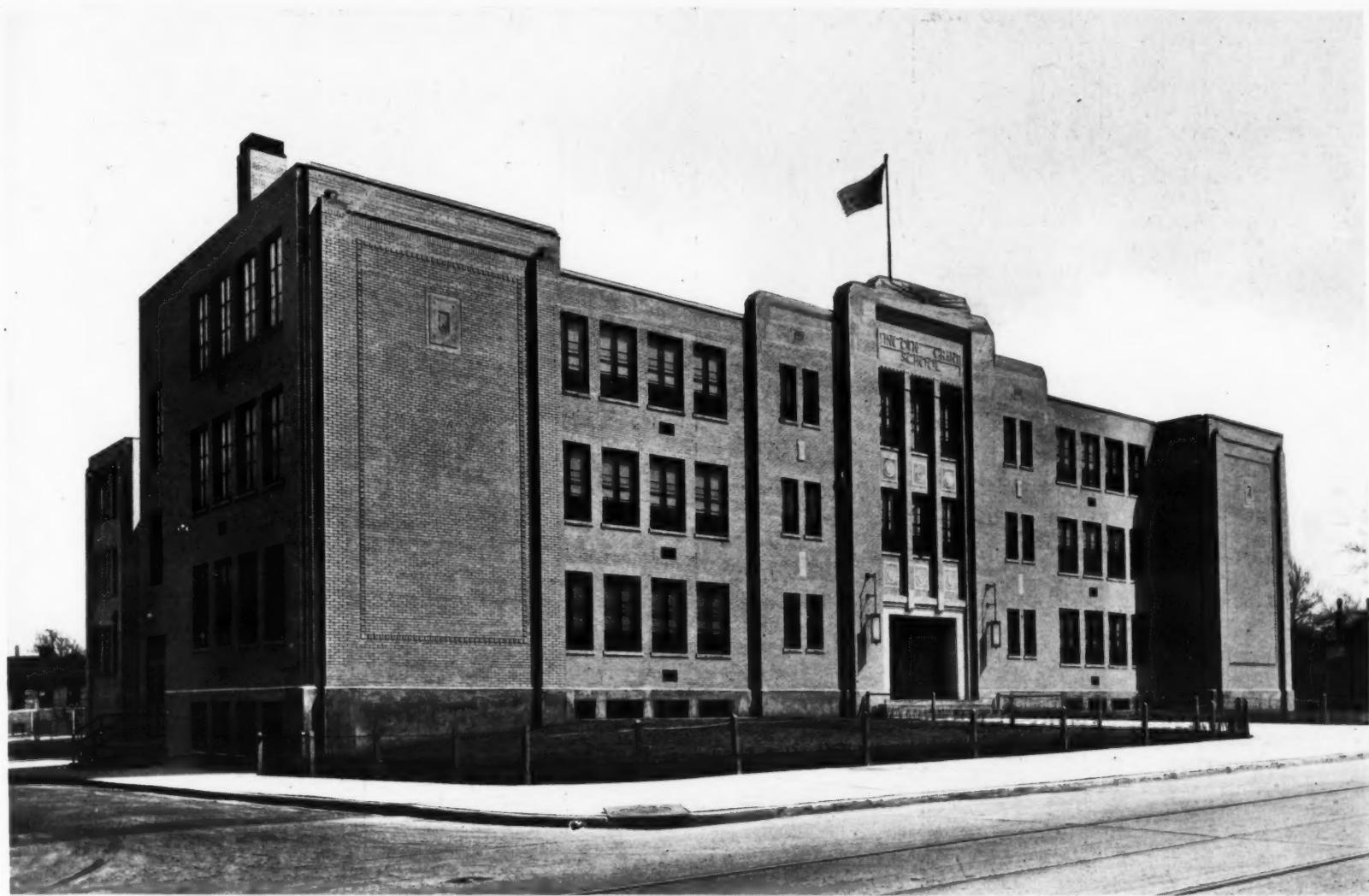
Benefits of 4-H Club Work in Rural Education—Mr. Harry L. Case, junior extension leader, Chenango county.

The School and Character Education—Mrs. John K. Norton, Associate Director of Research, National Education Association.

The Budget—Mr. Mark Graves, Director of the State Budget.



MURAL IN THE WASHINGTON IRVING HIGH SCHOOL, NEW YORK CITY, N. Y.
By Barry Faulkner.



LINCOLN GRANT SCHOOL, COVINGTON, KENTUCKY
E. C. Landberg, Architect, Cincinnati, Ohio.

The Lincoln Grant School: An Example of True Economy

E. C. Landberg, Architect

In Covington, the second largest city of Kentucky, the board of education in January, 1931, adopted a resolution providing for the construction of a modern school building, of adequate accommodations for the colored children of the city. The building was to be suitable for an enrollment of 119 students in the high school and 445 in the grades, and was to allow for some increase without enlargement.

The building, as planned, consists of 17 elementary classrooms, with a seating capacity of 35 each and four high-school rooms of the same capacity. In addition to the above, Mr. Glenn O. Swing, superintendent of schools, outlined educational requirements calling for a study hall with a capacity of 75, sewing and cooking rooms with capacities of 24 each, a laundry, a model apartment, a millroom and cabinetmaking room, a mechanical-drawing room, an auto-mechanics room, a music room, an artroom, a combined physics, chemistry, and biology laboratory for 24 pupils, a science-lecture room, a library, a cafeteria seating 150, a gymnasium, and an auditorium seating 600 persons. Separate playrooms for boys and girls, as well as a faculty room 22 by 25 ft. in size were also to be provided. It was stipulated that the cost of the building not including the equipment must not exceed \$200,000.

The site selected is in the heart of the Negro population, readily accessible; it fronts on one of the principal streets of the city and is bounded on two sides by narrow minor streets. The lot is 172 ft. wide by 300 ft. deep, and the building is set back only 40 ft. from the front property line, to allow space for a play field

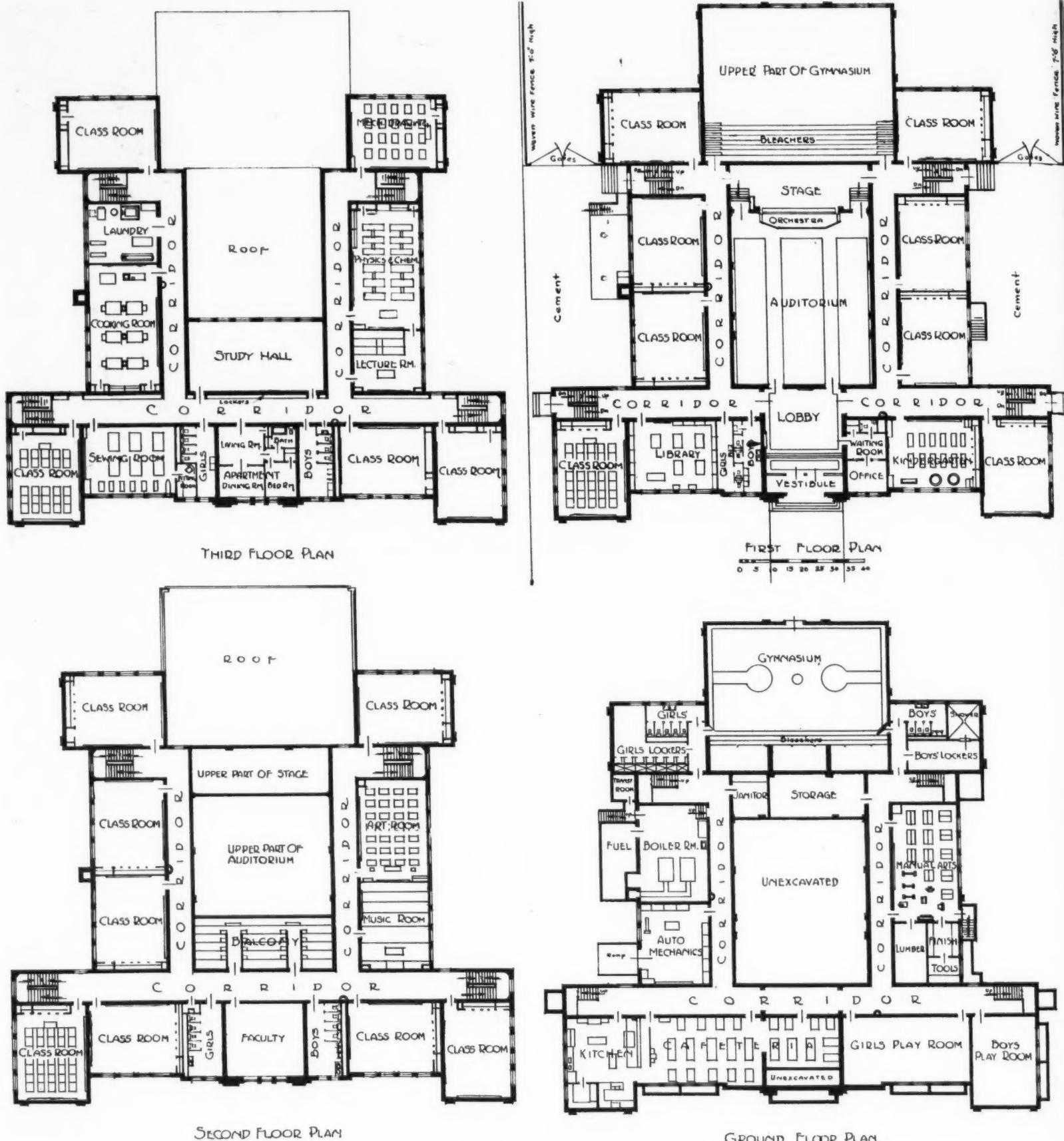
100 by 172 ft. in the rear. Due to the fact that the lot is bounded on the sides by streets, it has been possible to utilize practically the entire width and still insure adequate light and air. The arrangement has proved quite satisfactory; there has been no inconvenience from

traffic noises and the nearness of the classrooms to the side streets has proved no detriment as these streets have practically no traffic.

The slope of the lot to the rear has made it possible to make of the basement a ground floor, with an unusual amount of glass area.



AUDITORIUM, LINCOLN GRANT SCHOOL, COVINGTON, KENTUCKY
E. C. Landberg, Architect, Cincinnati, Ohio.



LINCOLN GRANT SCHOOL, COVINGTON, KENTUCKY
E. C. Landberg, Architect, Cincinnati, Ohio.

Only four areaways were necessary at the front of the building where the grade was raised to insure a proper approach to the front entrance and a better appearance of the building.

The four stair towers on the sides of the building provide exits directly to the side streets. Pressed-steel stairs, with alundum cement treads, iron railings, and oak handrails have been used throughout. The corridors and the interiors of shops and other rooms on the ground floor are lined with buff brick similar to that used on the exterior of the building.

The building is constructed of reinforced concrete and is faced with light-buff fireclay brick. Indiana limestone has been used sparingly for ornament. The note of simplicity has been carried out throughout the building, but

a careful effort has been made to use only the best materials and workmanship. The roof is of tar and gravel over concrete slab.

Passing through the main entrance the visitor enters a dignified lobby with quiet, two-toned terrazzo floor, buff-tile wainscoting, and plastered walls, plaster cornice and ceiling. The walls of corridors on the first floor and also those above have been faced with a glazed load-bearing tile in variegated shades of buff, which is easy to clean and offers a surface that does not require further painting or upkeep during the life of the building.

Each grade classroom has accommodations for 35 pupils and is equipped with a ventilated wardrobe and teacher's closet. The high-school rooms, which are of similar size, are equipped

in the same manner, except that lockers are provided in place of wardrobes. Each classroom has direct radiation for heating and a unit ventilator of the latest type. The floors are maple in a herringbone design, laid in mastic over concrete slab. Blackboards are of Pennsylvania slate and are provided with cork bulletin boards. All blackboards are of graduated heights conforming to the age of the pupils and dust guards are fitted over the chalk troughs. The equipment includes a telephone, a secondary clock, a bookcase, separate pedestal swinging chairs and steel desks. In the laboratory and lecture rooms comfortable tablet-arm chairs are used.

The science laboratory has four 6-student multiservice tables for chemistry, physics, and

biology, providing accommodations for 24 pupils. The room also has built-in cabinets, a fume hood, a book cabinet, a key case, and an instructor's demonstration desk. Adjoining the laboratory is a lecture room with a raised platform for students.

The booking room has accommodations for 24 students at six 4-student tables. The room has four unit gas ranges, built-in closets, wall cases, and instructor's table and supply table. A mechanical refrigerator and an exhaust fan are installed.

The laundry is equipped with a washer, an extractor, a tumbler, a mangle for flat work, two ironing boards, a two-unit laundry tray, a soap tank, and a laundry truck. The walls of the laundry are faced with brick.

The sewing room has six 4-student sewing tables, a cutting table, wall cases, a built-in ironing board, five foot-treadle sewing machines, and an electric sewing machine.

The model apartment comprises a living room, a dining room, a bedroom, and bath, all completely equipped for the instruction of students in the care of a home.

The music room has a capacity of 50 and is fitted with platforms and storage cabinets.

The library is of medium size to fit the requirements of the student body and is equipped



CAFETERIA, LINCOLN GRANT SCHOOL, COVINGTON, KENTUCKY
E. C. Landberg, Architect, Cincinnati, Ohio.

with shelving on three sides, magazine racks, and wallcases. Comfortable chairs, tables, and a receiving desk complete the equipment.

The art and mechanical-drawing rooms are equipped with the latest type of equipment and have ample storage facilities, closets and cases, as well as the latest type of instructor's desk.

The shops are located on the ground floor and have outside entrances. The shops are equipped with benches, electrically operated power machinery, and tools for woodworking, machine-shop practice, and auto mechanics.

The cafeteria, which is equipped with bentwood chairs and tables, has been planned for the load which experience indicates it will be required to carry. The kitchen is completely equipped with ranges, bakeovens, and various types of kitchen equipment, as well as a mechanical refrigeration unit, cafeteria counter, steam table, water cooler, and ice-cream cabinets.

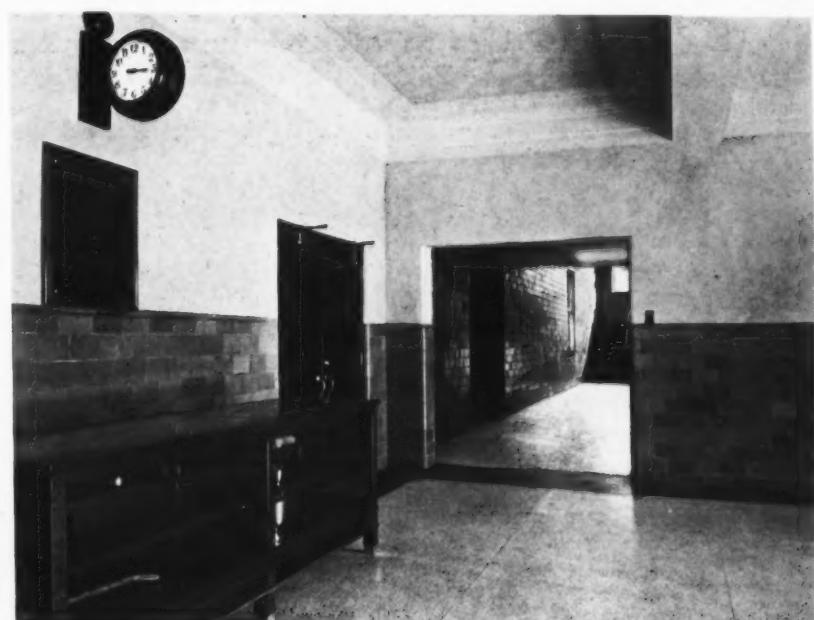
The auditorium and balcony have a seating capacity of 600 persons. The completely equipped stage has an electrical panel board, dimmer control, border lights, and footlights. The auditorium is heated and ventilated by large voluent units, thermostatically controlled.



MANUAL-ARTS SHOP, LINCOLN GRANT SCHOOL, COVINGTON, KENTUCKY
E. C. Landberg, Architect, Cincinnati, Ohio.



KINDERGARTEN



FOYER, SHOWING SIDE CORRIDORS
LINCOLN GRANT SCHOOL, COVINGTON, KENTUCKY
E. C. Landberg, Architect, Cincinnati, Ohio.



GYMNASIUM, LINCOLN GRANT SCHOOL, COVINGTON, KENTUCKY

SCIENCE LABORATORY, LINCOLN GRANT SCHOOL, COVINGTON, KENTUCKY
E. C. Landberg, Architect, Cincinnati, Ohio

These units may be used as recirculating units and are capable of changing the air six times an hour when the auditorium is in use. The units discharge through sound-absorbent louvres directly back of the grilles, so that no noise is discernable when the fans are in operation.

The boiler room contains two large boilers, capable of furnishing steam for the entire building during the coldest weather. Each boiler is equipped with a stoker of 1250-pound capacity. The boiler room contains an automatic hot-water storage system to provide hot water for the kitchen, toilet room, and showers.

The gymnasium on the ground-floor level is accessible from the playing field in the rear of the building and also from the locker and shower rooms which are adjacent. The bleachers are entered from the first-floor level. The gymnasium has a maple floor, laid in mastic over concrete, and the walls are tiled from floor to ceiling. The room contains equipment for basketball, baseball, tennis, and volleyball and is heated and ventilated similar to the auditorium.

The electrical equipment of the school includes a complete lighting system, a time and program system, and a stage-lighting system.

The plans for the building were prepared by Mr. E. C. Landberg, architect, of Cincinnati, Ohio, and the construction was carried out under the direction of his firm. Contracts for the building were awarded May 1, 1931, and the classes were organized and operated in March, 1932.

The total cost exclusive of furniture was \$188,900. The building contains 749,174 cubic feet, making a cubic-foot cost of 25 cents, and a per-pupil cost of \$257. The total cost of the equipment was \$36,137, or 19 per cent of the building cost and 16 per cent of the total cost for building and equipment.

SCHOOL BUILDING ECONOMIES IN ENGLAND

The progress of the depression in England during the past four years has made itself felt not only in reduced salaries for teachers, limitation of school programs, but also in rigid economies applied to the

planning and construction of school buildings. A significant circular recently issued by the Board of Education, which is the highest education authority in all England, contains some significant suggestions on "School Buildings: Economy and Construction." The circular (No. 1408) suggests that the Board is very much concerned to maintain the educational efficiency of the schools through the construction of school buildings suited to the educational programs to be carried on in them. It insists, however, upon most rigid economy in plan and materials.

"In the following memorandum suggestions are made which would, if adopted, in the Board's belief, secure large savings without loss of efficiency. In the past few months, elementary schools of three departments for infants, juniors, and seniors planned to provide modern facilities and built on the lines indicated in the memorandum have been erected at a cost of about £30 per place (pupil-station) and judging from the plans and specifications submitted to them, the Board sees no reason why this figure should be appreciably exceeded for such schools in any but quite exceptional cases.

"Although it seems unlikely that substantial savings can be looked for in the future from raw materials or alternative construction the Board in their inquiries and in observing the many and various sets of plans and specifications submitted to them have been impressed by savings that can be effected in the ordinary brick-built school, by lightness of structure, by standardization of units and constructional members, by attention to detail and finish, and by judicious selection of materials and fittings of every kind, and they believe that in careful attention to such matters lies the secret of the inexpensive and serviceable school buildings. . . .

"The warning is given that where traditional methods of building are continued the Board will in future expect such economies to be effected as recent experience has shown can be effected without jeopardizing the standards of the present-day school. This involves the closest scrutiny of every item and equally close attention to the smallest details of construction, however insignificant.

"On level sites and on stable ground, light single story buildings can be built on a concrete raft, which can be made to serve for the underflooring and thus save expense on foundations and footings, which are in many cases needlessly heavy.

"Heights above 11 ft. are not as a rule necessary, except for halls and other large rooms, so long as ample cross ventilation and natural light are secured. In rooms lighted and cross ventilated by long windows on opposite sides, and in cloakrooms, staffrooms, lavatories, etc., heights may be even less. . . .

"The assembly hall is frequently made too prominent an architectural feature and money is unnecessarily lavished on its internal finish. If kept in the background it can be treated simply externally and need only be quite plainly fitted and finished inside.

"As a rule, the corridors need not be wider than 7 ft. and 6 ft. is sufficient where there are rooms on one side only.

"Though sometimes necessary, division of rooms by glazed partitions is not to be recommended. They are expensive, not sound-resisting, or conducive to privacy, and interfere with the fitting of cupboards. The value of the light they transmit, moreover, is not greater than would be obtained by reflection from a lightly colored, corresponding wall surface.

"As a rule, glazed bricks or tiles as internal wall facings are not needed, except for part of the height of cloakrooms, offices, lavatories, and rooms used for the teaching of cooking and laundry work, and a substantial saving may be effected, if the use of glazed brick is limited in this way. Light and inexpensive forms of plywood dado paneling or linoleum, cork lino, and leatherette stuck to cement enable the temperature of a room to be quickly raised and are reasonably decorative; but as a rule, dadoes of hard, smooth cement for painting (or sprayed with cellulose enamel where cleanliness is important) are sufficient.

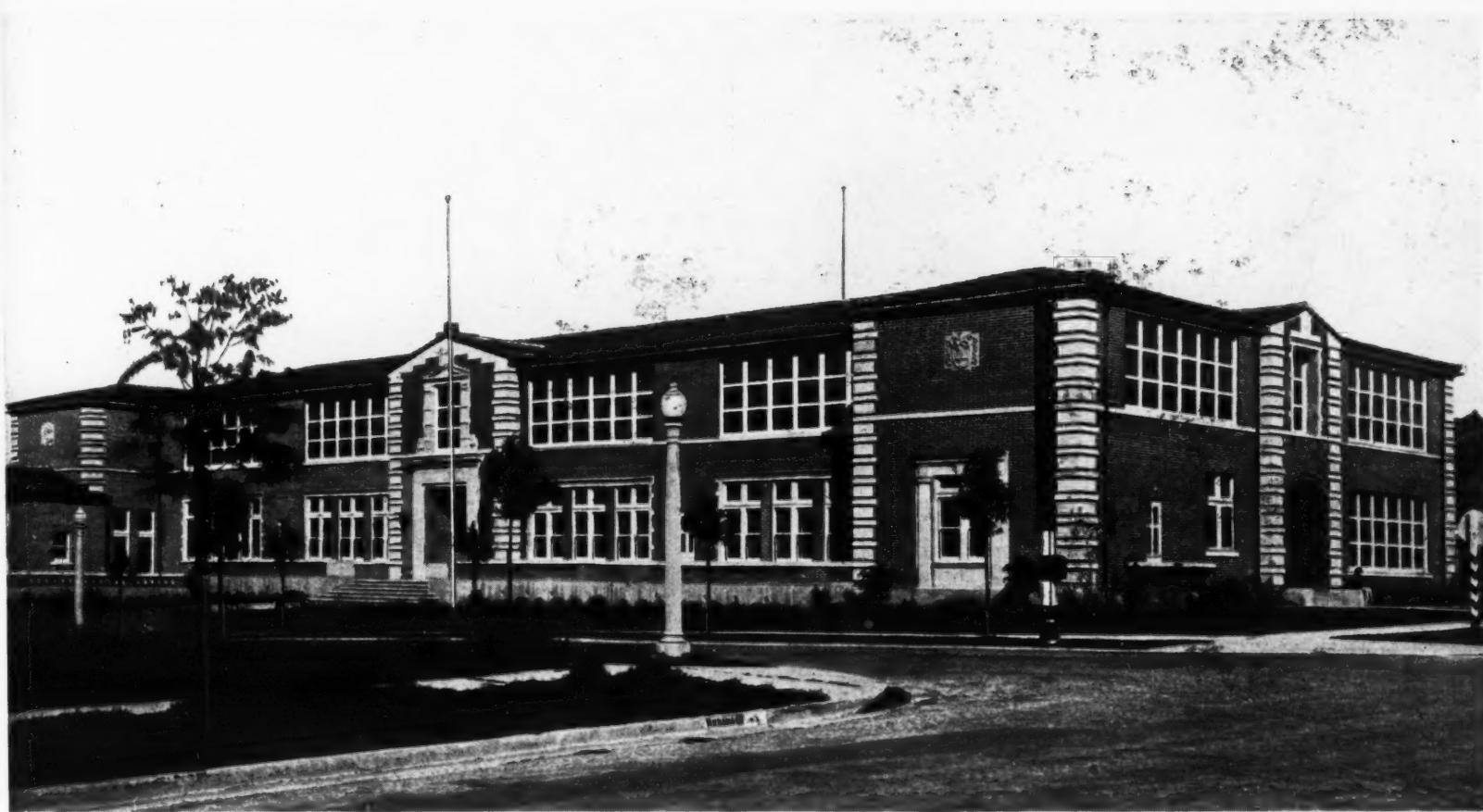
"All floors should be of fire-resisting construction and material, and generally speaking, floors laid on solid concrete are the most suitable, except in the case of rooms used for physical education. To prevent the tendency to dry-rot, the top of the concrete should be coated with tar and the underside of the boards treated with creosote.

"The playsheds can as a rule be omitted, but inexpensive bicycle sheds may be advisable and serve as shelters for the children against rainstorms. Their aspect should be away from the prevailing winds.

"Timber-framed schools can be planned on exactly the same lines as those built of brick or concrete. If placed on brick or concrete foundations, and treated with preservatives, there is every reason to believe that the wooden building would normally have a useful life of not less than 40 years and would not be unduly expensive to maintain.

"Primarily the timber-framed school is suitable for single-story buildings and when so applied shows the

(Concluded on Page 73)



EMERY PARK SCHOOL, ALHAMBRA, CALIFORNIA
Richard C. Farrell, Architect, Alhambra, California.

Educational Needs Considered Foremost in this Building

Forrest B. Routt, Superintendent of Schools, Alhambra, California

The Emery Park School, the newest elementary-school building in Alhambra, California, was completed in 1931, at a cost of \$113,000. Because every detail of the planning and construction of the building was based on the educational program and the educational and physical needs of the children, this structure has attracted the attention of educators and others interested in public schools.

A word on the development of the plan may be of interest: Before the building was undertaken, the board of education employed Drs. Ford and Hull, of the Education Department of the University of Southern California, in the capacity of a survey organization to ascertain, first, the community's school-building requirements, and second, to develop the educational aspects of the plans of the proposed building. With the survey data at its command, the board of education selected Mr. R. C. Farrell as architect and authorized him, under the guidance of Drs. Hull and Ford and the superintendent of schools, to proceed with the preliminary plans of the school. At this time, a citizens' advisory committee of five members was appointed by the board to function with the educational consultants, the superintendent, the faculty of the school, and the architect. This advisory committee was requested to interpret the community's wishes in regard to the building and to consider with the architect the practical problems in selecting materials and letting contracts, and employing labor. This set-up provided an intimate contact between the educators, the public, and the architect; it tempered the enthusiasm and the demands of the schoolmen; it served in checking the ideas of the architect; and it brought to bear the practical judgment of laymen each of whom was an expert in his own field. Finally, it directed the attention of the community to the project in a favorable way. The results obtained indicate that this is an ideal approach to a school-construction problem.

A Safe Building

As the school was to be built in a well-settled neighborhood, there was a limited choice of sites and a rather narrow plot of four acres was decided upon. The site imposed certain restrictions as to building and location on the lot so that a compact two-story structure, with south orientation and well to the front of the property, was indicated.

The building has exterior walls of solid masonry construction; the corridors and the stairs are of concrete construction; the remaining structural elements are of wood. As an extra precaution against earthquakes, the corridors and stair walls are braced with structural steel, which provides practically indestructible support for the concrete. The partitions separating the classrooms throughout the building, and the



KINDERGARTEN, EMERY PARK SCHOOL, ALHAMBRA, CALIFORNIA
Richard C. Farrell, Architect, Alhambra, California.



CLASSROOM, EMERY PARK SCHOOL, ALHAMBRA, CALIFORNIA
Richard C. Farrell, Architect, Alhambra, California.

first-story ceilings are soundproofed with a mineral felt. The ceilings of instructional rooms are of acoustic plaster. The corridors and stair walls, as well as the toilets and washrooms, have wainscots of glazed tile. All interior doors are of mahogany and exterior doors are of Kalamein construction.

The exterior of the building is designed in the Georgian style, is faced with red ruffled brick, and has trim of artificial stone of a gray-buff color. The roof is covered with variegated red tile. Except on the terrace and first-story ground frontage, the windows are of the awning type. Each sash is glazed with a single light so that no shadows are cast by the muntins. The classroom windows are in groups, or banks, without intervening masonry piers and with mullions reduced to a minimum width. The exterior sheet-metal work is copper.

terior sheet metal work is copper. Throughout the building, the materials have been selected for the purpose of minimizing maintenance costs and of achieving ultimate economy even at the expense of slightly increased first cost.

Electricity Generously Used

The building requires comparatively little artificial heat. A low-pressure oil-fired, sectional, cast-iron boiler provides steam for the radiators in the classrooms, special rooms, and corridors. The windows are depended upon for ventilation, and cross draft in all classrooms is provided in warm weather by means of transoms in corridor walls above the blackboards. In the cafeteria kitchen, a power-driven exhaust fan is provided to carry off heat and cooking odors.

A building like the Emery Park School requires electricity for an amazing variety of purposes. There is first, a complete lighting system so that the building may be used at night for social-center or adult school purposes. All parts of the building are connected by means of an intercommunicating telephone system. The principal has complete control of class changes by means of a program-bell and secondary-clock system. Gongs and a fire-alarm system provide against the danger of fire and panic. Most interesting of all is a complete public-address system, with a central panel in the principal's office, and loudspeakers in the

major rooms. The central panel enables the principal to telephone to all classrooms simultaneously. It is possible to broadcast radio programs, phonograph records, or addresses over a microphone to all rooms or a selected group of rooms, or a single room. The principal and fac-

ulty have come to regard the public-address system as indispensable in the conduct of the school.

Future Growth Considered

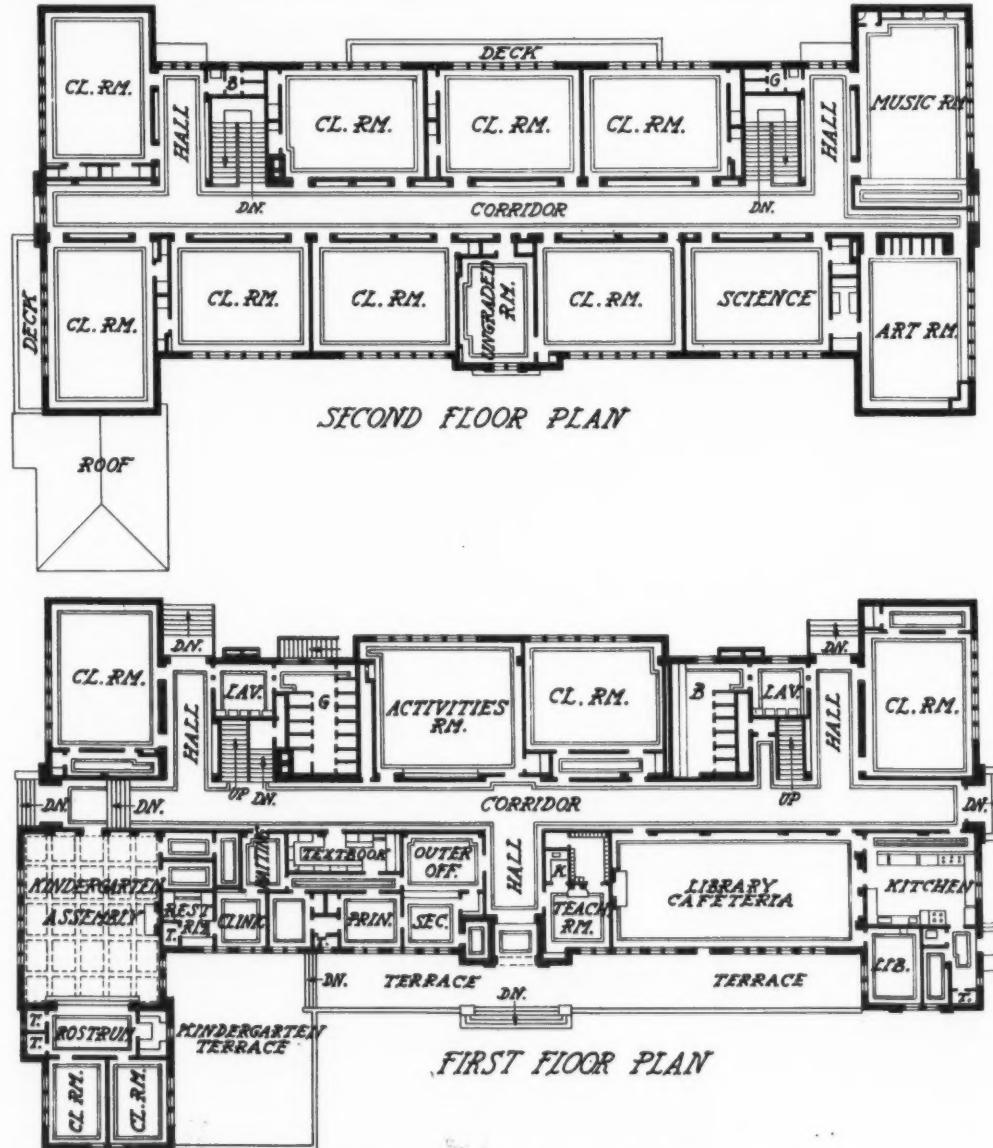
In developing the plan, the superintendent and the consulting staff were faced with the problem of a rapidly increasing population in the locality, together with the probable difficulty of future site enlargement. Therefore, the school has been so planned that it may in the future be easily adapted to a platoon system of education. For the present, a conventional elementary school is operated, with adequate provision for departmental activities. The arrangement of future units has been provided for in the present plan.

The building contains, in addition to twelve classrooms, an art room, an activities room, a music room, a social-science room, and a library-cafeteria, with a librarian's room and kitchen, a kindergarten unit, a bicycle room, and administrative quarters.

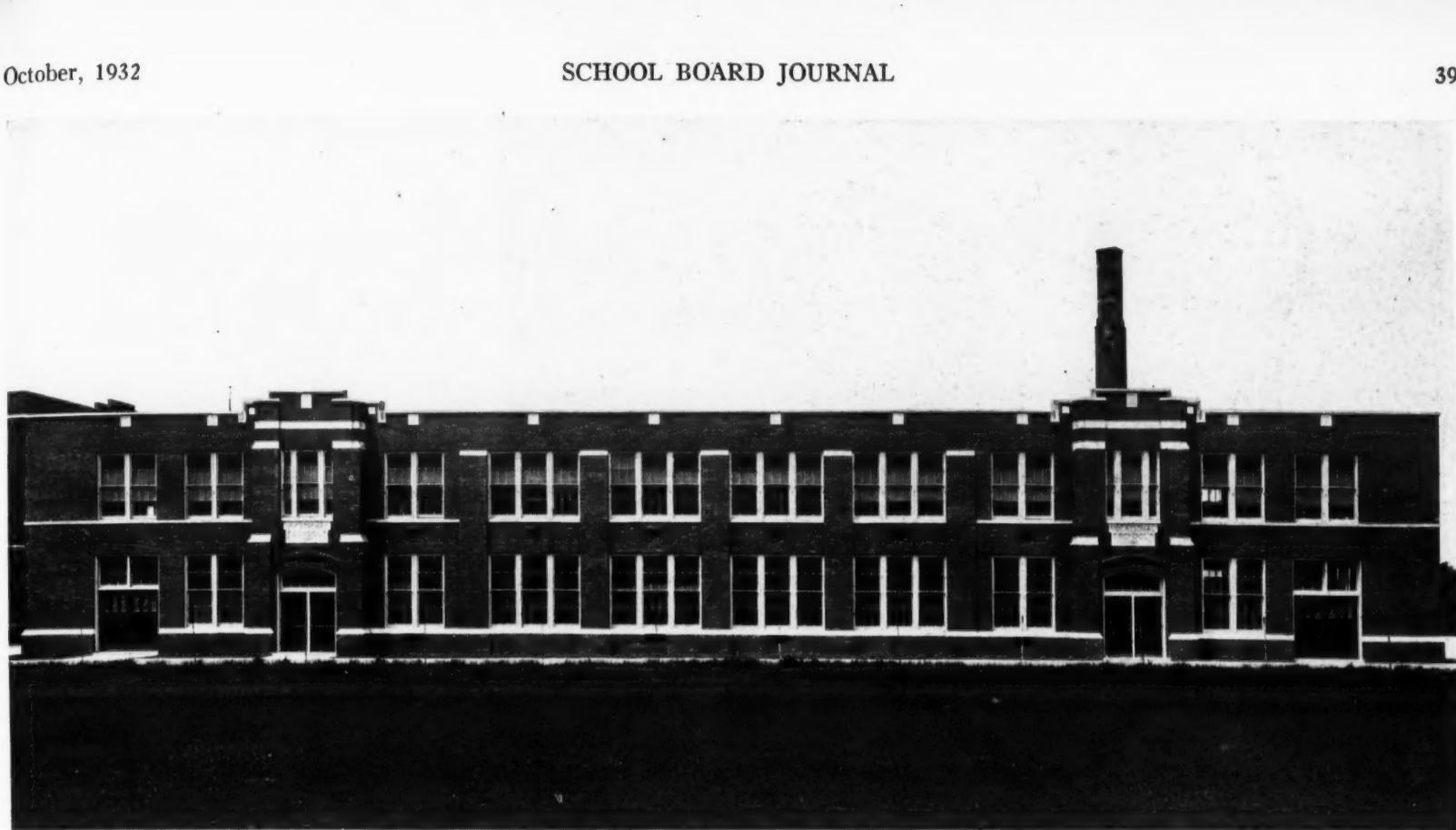
Each typical classroom is 23 ft. wide and varies from 30 to 32 ft. in length. The four rooms for primary grades have cloakrooms at the rear, while the upper grade rooms (on the second floor) have individual steel lockers, set flush in the corridor walls. Removable hat and coat racks in the corridor are erected only in inclement weather. In each classroom, at least one closet is provided for the teacher's effects and for current supplies. There is also in each classroom an open bookcase. Blackboards have been arranged on the front and corridor walls of all classrooms and tackboard panels are provided at the rear. Each room has two exits to the corridor.

The music, art, social science, and activities rooms differ from standard classrooms in being

(Continued on Page 74)



FLOOR PLANS OF THE EMERY PARK SCHOOL, ALHAMBRA, CALIFORNIA
Richard C. Farrell, Architect, Alhambra, California.



SOUTH MILWAUKEE VOCATIONAL SCHOOL, SOUTH MILWAUKEE, WISCONSIN
Parkinson and Dockendorf, Architects, La Crosse, Wisconsin.

Housing the Vocational School Shops

The South Milwaukee Vocational School, South Milwaukee, Wisconsin

With the completion of its new vocational unit last year, the South Milwaukee (Wis.) High School plant now ranks as one of the finest and most complete of its size in the country.

Located in a busy little industrial town and in close proximity to the widely varied industry of Milwaukee, South Milwaukee has long been conscious of the need of its high-school students for greater opportunity in the selection of a career.

The new vocational school fills that need perfectly. In addition, it concentrates under one roof all of the major vocational-training divisions, with few exceptions, thus eliminating the noise and clatter of shopwork from the high-school building proper. The exceptions referred to are the electrical, plumbing, and painting and decorating shops in the basement of the high-school building. The electrical shop is more of an experiment room for junior-high-school students, while the other two do not involve the noise or the number of students that the larger shops do.

A study of the aerial photo (reproduced on the front cover of this issue) of the South Milwaukee plant reveals a decidedly novel arrangement. A vocational school, distinct and separate in itself, yet an integral part of the junior- and senior-high-school plant.

Under this plan, which calls for the close correlation of the three units, the seventh-grade students are introduced to the rudiments of home mechanics in the first semester and woodworking in the second; electricity and mechanical drawing are touched upon in the same order in the eighth grade. This is required work for these two grades. In grade nine the student is encouraged to study machine-shop work in the first semester and auto mechanics or patternmaking in the second.

These courses, covering six or seven fields, are termed "finding" or "exploratory" courses and are designed to help the student orientate himself to the type of work that appeals to him most. Thus, after three years of experiment, the student, in the tenth grade, selects his field of

interest and follows it through for the remaining three years. Particularly apt students in the industrial-arts courses are given a schedule of studies that will permit them to continue in university work if they so desire. This is made possible by the intermingling of the three units — the junior, the senior, and the vocational school, an arrangement that is well worth watching.

As one enters the new vocational building through the passage that connects it with the junior and senior high schools, he comes upon the general shop, which is also fitted out as a very complete woodworking unit. The room will accommodate 24 students at one time with

plenty of working room for each student. Spacious, well-equipped and well-lighted auto-mechanics, mechanical-drawing and machine shops are also included on this floor, in addition to two convenient storerooms, a director's office and boys' and girls' toilets. The present mechanical-drawing shop was originally intended for use as a printshop, but existing financial conditions made it necessary to defer the purchase of the necessary equipment for the time being.

The second floor houses a fine home-economics department; a sewing and fitting room; a room for related household arts, in which the dozens of minor jobs that come up around a home are discussed; a typewriting room con-



DOMESTIC SCIENCE DEPARTMENT, SOUTH MILWAUKEE VOCATIONAL SCHOOL,
SOUTH MILWAUKEE, WISCONSIN
Parkinson and Dockendorf, Architects, La Crosse, Wisconsin.



WOODWORKING SHOP, SOUTH MILWAUKEE VOCATIONAL SCHOOL,
SOUTH MILWAUKEE, WISCONSIN
Parkinson and Dockendorf, Architects, La Crosse, Wisconsin.



METALWORKING SHOP, SOUTH MILWAUKEE VOCATIONAL SCHOOL, SOUTH MILWAUKEE, WISCONSIN
Parkinson and Dockendorf, Architects, La Crosse, Wisconsin.

taining 45 typewriters and a fine commercial department. There is also a teacher's room and a library that is used as the office of the school publication. There are boys' and girls' toilets.

The home-economics department offers the novel arrangement of five distinct kitchens, each one complete in itself with a working range, cupboard, table, and sink. A large electric refrigerator serves the entire class, and a spacious pantry easily takes care of all the necessary supplies.

The building is of reinforced-concrete construction, with floors of hollow tile and concrete. The exterior facing of the building is of brick, trimmed with Bedford stone. The walls of the shops on the first floor are of brick with steel fenestra window frames throughout. A maple finish floor is used for classrooms and shops. The walls and ceiling of the second floor are plastered. The toilet rooms have tile floors and wainscoting, while the corridors and stairs are terrazzo. The building is heated by a unit should not be permitted. All children who are well should get a great many hours of big-muscle activity or play in the open.

heating system, using automatic temperature control.

At present the capacity of the building is about 275 students. The building cost \$95,500, with an additional \$8,750 being spent for new equipment and \$3,700 for improvement of the grounds. Quite a bit of equipment was transferred from the senior-high-school building, where the vocational work had been carried on previously. The cost per cubic foot approximated 26 cents.

Mr. H. E. Smith is superintendent of schools in South Milwaukee, while Mr. George O'Brien is principal of the high school, and Mr. A. G. Western, director of vocational training.

Messrs. Parkinson & Dockendorf of La Crosse, Wis., designed the building and supervised its construction.

SCHOOL SEATING AND POSTURE

The recent official bulletin of the department of public instruction of the State of Washington discusses the subject of school seating. It says:

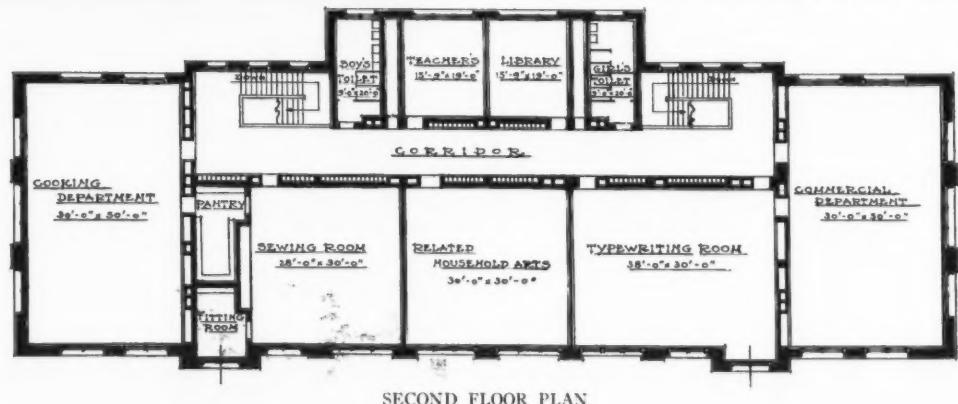
Seating: The crowded condition in some of our schools this year has made it almost impossible to observe the best seating arrangement in every instance. Inability to make a complete adjustment of seats to pupils sometimes brings about a *laissez faire* attitude toward this important item in hygienic school living.

Seats should be of such a height that the knees will be at right angles, with the feet resting firmly upon the floor. Depth of the seat should be about three fourths the length of the thigh. Some authorities say a seat, the front edge of which is two thirds of the distance to the knee, is long enough.

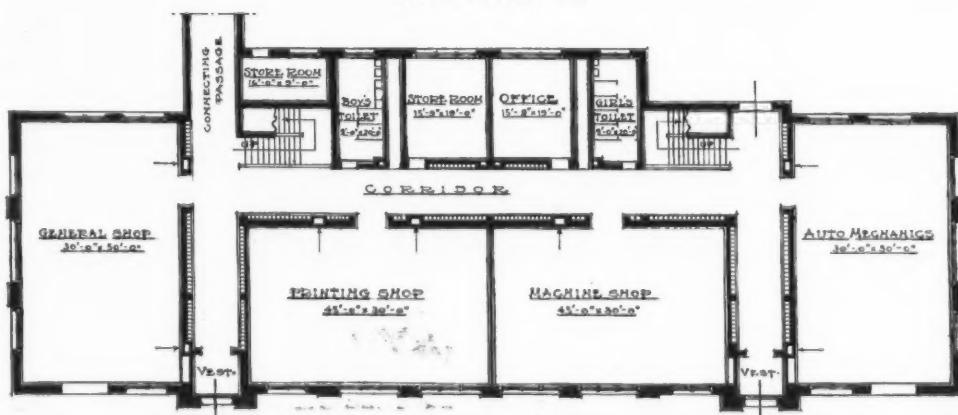
The desk should be of a height that will support the arms without hunch or slump of shoulders. The desk top should be placed at such a distance from the seat that it will overlap the front edge of the seat from 1 to 2 inches. This latter relationship is sometimes stated: the distance from the desk edge to the lumbar support should be such as to permit a correct position of the trunk when in a writing position.

Mental and emotional satisfactions have a desirable effect upon posture. A well-planned and well-executed school program will bring about successful accomplishment and promote the development of self-confidence. This, in turn, facilitates good posture.

The teacher's attitude and commendation can stimulate cheerful mental attitudes, an aid to good posture. She can develop a desire for good posture on the part of the child. Long periods of sitting



SECOND FLOOR PLAN



FIRST FLOOR PLAN, SOUTH MILWAUKEE VOCATIONAL SCHOOL,
SOUTH MILWAUKEE, WISCONSIN
Parkinson and Dockendorf, Architects, La Crosse, Wisconsin.

The Treatment of Schoolhouse Floors

Jens Flikeid, Minneapolis, Minnesota

The proper treatment of schoolhouse floors is a most important problem to those responsible for school janitorial service; and the maintenance of these floors is an equally important problem. However, manufacturers of floor-treatment materials, and school officials as well, have completely overlooked the daily maintenance phase of this science. The result has been that schoolhouse floors in general are in a shockingly insanitary and unsightly condition, due to no fault of the original treatment material applied to the floors, but to lack of understanding of how to prepare the floors for reception of the treatment, and what methods to apply in their subsequent maintenance.

When selecting the material to be used in treating schoolhouse floors, whether wood, cement, terrazzo, asphalt, rubber, mastic, composition, or any other kind of flooring, great care must be exercised to see that the material will not injure the surface of the floor at the first application. It is no less important that the merits of the material to be used, and the method of procedure employed in the subsequent care and maintenance of the floors, shall have been clearly thought out from beginning to end. Almost without exception, the failure of the numerous materials on the market for the treatment of schoolhouse floors has been due to neglect on the part of the manufacturer to solve the problem of care and maintenance following the application of his treatment.

Basically, the purpose of treating schoolhouse floors is to protect them against severe wear, to perpetuate their attractive appearance, and to allay the dust which otherwise becomes diffused through the atmosphere and inhaled by the room occupants to their physical injury.

Securing Proper Results in Treating Floors

To treat a schoolhouse wood floor so that proper results will be had without destroying the attractive appearance of the floor itself, the pores of the flooring should be filled and rendered impervious to dirt and moisture. The treatment material should be without objectionable odor, nonslippery, non-gummy, noninflammable, nonevaporating, nonoxydizing, and nonwater-spotting. The material should form a thin filament on the surface, of a pliable or flexible, yielding nature. This filament should be somewhat viscous without being sticky, and sufficiently viscous to cause dust and dirt to adhere until removed by sweeping or mopping. The material should penetrate the flooring to a reasonable extent not only to preserve the floor, but through capillary attraction to replace the surface filament as fast as it is worn off, and thus to flush the pores of the flooring and keep it sanitary.

In public-school buildings a hard-surfaced floor should be taboo. Dirt and dust settle upon such floors only to be swirled into the atmosphere when disturbed, to the discomfort of the room occupants, and to alight upon the furniture and all other surfaces in the room, thereby creating additional and unnecessary work for the janitors. Varnished and shellacked floors come under this classification. The surface of these floors is hard and brittle. Friction breaks them down and causes them to scale.

Hardwood floors, most commonly used in school buildings, have presented the greatest problem to school administrators because of the time involved in keeping them sanitary, clean, and in a state of beauty, despite the constant wear to which they are subjected by the restless feet of the children who occupy these buildings.

The scrubbing of hardwood flooring with soap and water has been discontinued in most school systems. It has been found that the strong soaps and lyes that are required to keep the floors sanitary and clean also seriously injure the surface of the wood. Notwithstanding the best care and attention, schoolhouse floors when treated with soap and water

alone become dark and unsightly, and invariably give off the well-known and objectionable sour "schoolhouse smell."

When soaps and lyes are used for cleaning floors, the destructive ingredients used in these materials to get dirt out of the pores in the flooring, destroy the soft fibers of the wood, whereas the hard fibers withstand the chemical action of the destructive ingredients. This erosive action leaves the floors rough and uneven. The etched surface catches and holds dust and dirt, which cannot be removed by sweeping with corn brooms or bristle brushes. The constant walking upon these dirty floor surfaces creates a dust composed of fine particles of dirt and wood fibers so that sharp particles of sand and dirt present on these floors cut loose from the wood when the floor is walked upon. Thus a scrubbed floor, when dry, is obviously a dusty floor.

The next step taken by progressive school systems was to apply an oil to the wood floors. The object of this treatment was to settle the dust which had become particularly objectionable as a vehicle upon which disease germs were carried. It was found that oil alone made the floors black and unsightly.

Preservative Treatment for Floors

To meet the requirements of a properly treated and well-maintained schoolhouse wood floor, great care should be exercised to discover a treatment material that will preserve the wood, make the floor sanitary, dustless, and well appearing, and one which will not be hazardous to life and limb, and will be inexpensive in continuous use.

This type of material, usually called wood preservative to distinguish it from the common floor oils, is generally a compounded product composed of a number of oils and gums, both vegetable and mineral, each of which serves a useful purpose when combined, but is of no particular value when used alone. In the preparation of a good floor preservative, for example, one ingredient is used for its penetrating quality; another to increase the "body" so penetration will not be too great; and another because of its preservative value. Then there are gums to increase the body of the material and to reduce the slipperiness, and there are oils to keep the gums in solution. There are driers to accelerate drying; coloring ingredients to give the desired finished color; and still other ingredients to provide a pleasant odor.

The proportion of each ingredient in a wood preservative is obviously of importance because the lasting qualities of the preservative are greatly reduced if too much of the penetrating oil is used or if the ingredients quickly evaporate, while too much body oil, if added, reduces the penetration and leaves a gummy, sticky surface. A surface of this nature catches dirt which cannot be removed even when attacked vigorously with standard cleaning tools and materials.

The application of floor preservative to new and old wood floors, and the care and maintenance of other types of flooring, become very simple operations when understood. The rules laid down for the guidance of employees in the Minneapolis public-school system are as follows:

Wood-Floor Preservative

Wood-floor preservative hardens wood floors and imparts to them an attractive golden color after a brief period of use. A preserved floor that is well taken care of assumes a lustrous, polished appearance similar to the effect produced by varnish. The floor is also made dustless, as the viscosity of the preservative holds down the dust. When the sweeping is done with mops, instead of brushes or brooms, much better results are obtained. This method of sweeping eliminates scrubbing with soap and water, or the use of sweeping compounds.

Preserving a New Wood Floor

A new wood floor, when laid, generally must be sanded or scraped in order to level the surface. If sanded, the proper procedure is to go over the surface in three different directions: First, in the direction opposite from that in which the floor is laid; second, diagonally; and third, in the same direction in which the floor is laid. If coarse sandpaper is used in the first two operations, fine sandpaper should be used for the last operation. The object is to get the surface just as hard and smooth as possible. Thoroughly sweep and dust the floor and the rooms. Remove all floor stains. To remove these stains it may be necessary to use an acid bleach, but care must be taken not to allow the bleach to remain on the wood long enough to burn it.

Approximately five gallons of a good wood-floor preservative will preserve a new floor area of 800 square feet. If the preservative has not been properly compounded, it may require as much as ten or twenty gallons of the material to treat 800 square feet of floor area and the results will not be nearly so satisfactory as with the smaller quantity of good material. This may be due to the material's having too great a penetration factor or because of the rapid evaporation of some of the ingredients. On the other hand, if the material is heavy and with no penetrating qualities, it may require only one or two gallons for each 800 square feet of floor surface. In this event, the material remains on the surface, is of no value to the wood, and quickly disappears when the floor is used.

Pour the material into the wringer pail. Immerse a mop in the wringer pail and wring out just enough to prevent dripping. First apply the material by hand around the edges of the floor for about 6 inches out from the baseboard, rubbing hard. This is to prevent the baseboard from being splashed. The material is not to be applied to the baseboard. Then apply the material freely by mop to the remainder of the floor, thoroughly rubbing it into the floor. This completes the first operation. Rubbing the material into the floor prevents the preservative from running into depressions. If any light or dry patches appear on the floor, re-treat these until a uniform color is obtained over the entire floor.

No one should be allowed on the floor for at least six hours after it is preserved. The floor should then be polished with No. 3 steel wool. Care should be taken not to use iron wool for steel wool. Steel wool may be used with an electric polisher, or by placing it under a weighted pad, or by any other method that is convenient for the operator; the object is to get the floor as smooth and as hard as possible before it is used. If it is necessary for workmen to use the room immediately after the floor is preserved, the floor should be partly covered with building paper. If this has to be done, a strip should be placed around each side of the room and connected by two cross strips.

The floor is now ready for the furniture to be placed upon it. After the furniture has been placed, the tracks on the floor left by the workmen should be cleaned by polishing with a mop dipped in preservative and wrung out so that the mop will just be moist. This should be done before the floor is used.

Care should be taken not to use the preservative on floors made of any material other than wood, since many preservatives leave a permanent stain. Shoes should be wiped clean before stepping from a newly preserved floor to a floor other than wood. When preserving a schoolroom floor, place a mat of heavy paper at the entrance to the room. The pails containing the preservative and the tools used should be set on the paper mats to prevent the staining of the corridor floor.

Brains and manual labor must be used when applying preservative to a schoolroom floor. If the preservative is slopped on, or if it is not thoroughly

rubbed in, the floor will become black and gummy. If this happens, the material is not to be blamed.

Preserving an Old Wood Floor

"An oil-soaked floor can be reconditioned at small expense. Sprinkle an oil solvent on a small area of the floor, spreading it about with a mop to insure even distribution. Then scrub the floor with a scrub brush. After the oil comes to the surface, remove the dirty solution with a mop or squeegee. Rinse with clear water. If the floor has been oil-soaked for a long time, repeat the operation. If there is any more in the floor, in a week or so the air will draw it to the surface. Then repeat the cleaning operation. A week, preferably two weeks, should elapse between each cleaning until all the oil is removed."¹

An old wood floor which has been maintained for a number of years by scrubbing with soap and water, or one which has been treated with oil and has become badly stained, should be scrubbed with steel wool and a strong cleaning solution, and then thoroughly rinsed. Do not use iron wool. Some floors have to be scrubbed two or three times before they are absolutely clean.

The floor should then be bleached with oxalic acid dissolved in water — one pound of acid to nine parts of water. For the best results, the bleach should be applied to the floor while the surface is damp. Nine quarts of bleaching solution is sufficient for a surface of 150 square feet.

After the floor is dry, approximately five gallons of a good wood-floor preservative will be enough to treat 800 square feet of floor area. Polish the entire surface with No. 3 steel wool until the floor is smooth and hard. This polishing may be done in any manner agreeable to the operator, but the work must be done thoroughly under considerable pressure, and not by merely flicking the surface of the floor.

Care should be taken not to use too much preservative when preserving the floor. If the floor shows tracks twelve hours after it has been preserved, the indications are that too much preservative has been used.

Wood preservative, like any other liquid, raises the soft fibers of the wood, producing a nap or fur coating on the surface. This coating catches and holds the fine particles of dust and dirt, eventually causing the floor to turn dark. A microscopic examination of many wood floors has revealed that their dark color is not due to discoloration of the wood itself, but rather to the dirty nap or fur. Upon removing the dirty nap, the wood has been found to be clean. For this reason it is advisable to remove the nap from the wood surface on the day following the first application of the preservative. By so doing, the surface of the wood floor is left smooth and even, with no projections to catch and hold free dust and dirt.

The nap or fur on the surface of a wood floor may be removed by the use of a steel-wool buffering machine, or by steel wool on a pad attached to a handle long enough so the user will not have to stoop over unnecessarily. Any other method may be used that may be devised by the operator. Energetic janitors have been known to steel-wool their floors by foot power only. This is done by placing a pad of steel wool under the shoe of the operator, vigorously moving the foot back and forth and exercising considerable pressure on the pad. This procedure is hard work for the operator, but the best floors inspected by the writer have been steel-wooled surfaced in this manner.

Steel-wool buffering machines are recommended for surfacing or conditioning schoolhouse floors after they have been preserved, for the reason that these machines save much time and labor as compared with manual work. Any narrow, unsurfaced strips left by the machine adjacent to baseboards and around the legs of desks and furniture must be hand-treated after the machine has been used.

Even a good floor preservative, because of the factor of evaporation, slow as this evaporation may seem to be, and because of the scuffing of many

feet, must be replaced about three times a year in order that the floor may retain an even appearance in color and texture. A poorly compounded preservative must be replaced oftener than three times a year, especially in the classroom aisles and under seats. It is, therefore, wise to select a preservative which blends into the old material and which does not leave a permanent patch when applied to bare and worn spots.

Cleaning and Re-Preserving Old Wood Floors

Wood floors that have previously been preserved should be re-preserved at least twice every year, and preferably three times a year.

Sweep the floor perfectly clean; remove gum and other stains. Fill the wringer pail two thirds with a good wood-floor cleaner especially compounded for this purpose. This cleaner has very definite duties to perform, and its compounding merits just as much thought and consideration as does the compounding of a good preservative. As its name indicates, a cleaner must have a cleansing ingredient in it. This ingredient must be of such a nature that it will dissolve the gums and heavy parts of the oils left in the surface of the old floor, so that the residue can be removed when the floor is mopped and still not penetrate and remove the preservative under the surface of the wood. Saturate the mop in the wringer pail and wring out. Mop the floor and remove the dirt with as little material as possible by rubbing energetically. Allow the floor to dry for an hour.

Disturb all of the remaining dirt and stain by rubbing with No. 3 steel wool. This may be used in any way desired by the operator, just so the work is thoroughly done. Do not use iron wool. Sweep the disturbed material from the surface of the floor. Then go over the entire surface once more with clean cleaner-material by immersing a clean mop in the wringer pail and wringing it out, after which the floor should be re-preserved. When dry, polish thoroughly with No. 3 steel wool. The object is to get the surface clean, smooth, and hard.

Care should be taken not to use too much material when cleaning and re-preserving a floor. If the floor shows tracks twelve hours after it has been treated, it is likely that too much preservative has been used. When this occurs, the floor should again be gone over with the cleaner.

When the cleaner in the wringer pail becomes dirty, it should be emptied from the pail into another container and allowed to stand until the dirt settles. The clean material should then be poured off as it can be used again.

Daily Sweeping of Wood Floors

Wood floors should be swept daily with a floor mop treated with cleaner. The cleaner should be sprayed into the sweeping mop and not poured on. Just enough material should be used to control and collect the dust.

The mop should be used in a similar manner to a sweeping brush. The sweeping mop has the advantage over a sweeping brush in that it not only removes all surface-free dust and dirt, but also removes the surface stain, keeps down the dust, and restores to the floor enough material to make up for that which has been worn off by the shoes of the pupils during the day.

All light, worn patches which appear on the floor during the intervals between general cleaning periods, should be treated by dampening a cloth in wood-floor preservative and rubbing the spots that show wear. When dark patches begin to show, they should be removed immediately with steel wool and then treated as a light patch is treated. This constant, daily attention results in a well-maintained floor of uniform color.

When a great amount of mud and sand is carried into the building, floors may be swept with a floor brush, immediately followed up with a sweeping mop.

It is important to keep sweeping mops clean and properly treated. Material should be sprayed into the mop and not poured on. Mops should be well dusted out before being sprayed and should not be used for at least six hours after being sprayed.

Cement and Terrazzo Floors

Cement and terrazzo floors in which cement is used are generally soft after being laid, due to lack of uniform chemical action necessary to harden the material in the finished cement. This soft condition causes the cement to crumble and break up, and what is generally known as "dusting" and "sanding" takes place. This loose surface dust and dirt is not only annoying from the standpoint of cleanliness, but causes an abrasive action which soon wears out the floors. With terrazzo floors, the cement between the pieces of marble in the aggregate wears away and the pieces of marble project above the cement. This condition makes sweeping difficult and injects an element of danger to children who trip when walking on these floors.

To overcome this condition a cement-hardening preparation should be applied to all flooring in which cement has been used, in order to complete the chemical action and bind and harden the surface. This treatment eliminates dusting and sanding and adds long life to the floor.

Hardening Cement Floors

Cement floors, immediately after they are laid, should be swept clean and treated with a cement-floor hardener. The hardener is applied with a mop and according to directions of the manufacturer of the hardener used. It is not necessary to apply the hardener to baseboards. Cement-floor hardener generally causes a white residue, or "bloom," to rise to the surface of the floor. This residue should be removed by dry brushing or scrubbing.

After floors are put into use, the daily sweeping should be done with either a brush or a treated hall mop. A hall mop is preferred as:

- a) It eliminates the use of any kind of sweeping compound made of sawdust, sand, etc.;
- b) It reduces the time required to do the work;
- c) It eliminates dust.

When it becomes necessary to clean a hardened cement floor, it should be scrubbed with water and any good liquid cleaning material.

Cement-Floor Filler

No matter how carefully a cement floor is troweled when laid, the finished surface is usually rough and coarse. This condition makes the floor difficult to clean and uneven in wearing qualities.

To remedy this situation, the use of a cement-floor filler or surfacer has given very satisfactory results. The rough surface of the hardened cement is made smooth and even and sweeping is rendered easy and effective. Other beneficial results are:

- a) It prevents surface wear on new cement floors.
- b) It fastens and holds old floors that have become rough and dusty.
- c) It prevents liquids from penetrating the floor.
- d) It deadens sound.
- e) It makes walking easy, as shoes grip the surface and do not slip.
- f) It completely eliminates cement dust.
- g) It eliminates the use of sweeping compounds made of sawdust, sand, etc., if floors are swept with a mop.

It is not recommended that cement floors be painted. When paint has once been applied, all subsequent methods of treatment are frustrated. If a painted cement floor has begun to disintegrate so that sanding and dusting have set in, the paint prevents the use of a cement hardener to overcome this condition. It is also difficult to patch a painted cement floor.

On the other hand, if a cement floor has been treated with cement-floor filler, the filler can be easily removed if the cement itself develops defects which need to be remedied. The filler can be patched when worn spots appear without defacing the appearance of the floor.

Filling Cement Floors

The floor should be thoroughly clean, warm, and dry before a cement-floor filler is applied.

Heat the filler by placing the pail containing it in a larger vessel partly filled with very hot water.

(Continued on Page 72)

Books: Tools of the Schoolroom

Wm. John Cooper, Commissioner of Education

Think back to the days of childhood. Nearly all of us can remember at least one teacher who was superior and who made a lasting impression upon us. Some of us were so fortunate as to have two such teachers, some three, and perhaps a few, four. Outside of that group, however, what was the source from which we got such educational advantages as our schooling gave us? Careful thinking will bring almost everyone to the conclusion that except for such work as we did under a few such superior teachers the good which we got from our schooling came from our individual study of the books which we had.

What was true then is true today, though perhaps to a somewhat lesser degree. Due to the superior training which our teachers' colleges give today, it is probable that there is a somewhat greater proportion of really superior teachers who are able to do that kind of work which does leave its mark on the children and which will remain with them as long as they live. Even those teachers, though, are greatly assisted in their work if they have an adequate supply of books suited to their purpose. No quicker method can be found of determining that fact than to interrogate those very teachers.

The public in the United States has been quick to recognize the advantages of education. This realization started early and bore fruit early and the conviction has grown steadily from those early days to the present time when in practically every hamlet of the United States the school buildings and the school equipment generally are the things to which the public points with the greatest pride. For some reason the public has been less generous in its equipment of school textbooks than in its equipment of almost any other thing connected with the schools. The reason is not difficult to find. The school buildings, monuments as they are, represent an expense done with when once undertaken, and not a recurring expense. The number of teachers and the pay which those teachers receive is a matter of public pride. No community likes to be made up in part of a group of poorly paid teachers. About the only item which remains which can be cut when budget cuts are called for—and they always are called for—is the book budget. Data which I have obtained

indicate very clearly that in this period when there is again a sharp demand for budget cuts slashes are being made in many places in this very important but low-cost item. How many school boards think when they cut the textbook item that they are seriously hampering the work of the school teachers? How many school superintendents think that the cost of schoolbooks is only about one fortieth (2½ per cent) of the cost of the teachers using them? How many in the general public remember that with them the textbook was an extremely important item and that cutting it is taking away from the children a very large part of the educational benefit which they could get from their school attendance?

I am so impressed by the importance of this problem that I am taking this method of suggesting to each and every school-board member that he canvass the situation in his community and determine what part of the expenditures for schools goes for the purchase of books and whether or not that part is adequate to the needs of the situation. If it is not, it is self-evident that it becomes the duty of that school-board member, first, to see that no penny-wise, pound-foolish policy is pursued; it becomes his duty to see that the teachers in his community, particularly in this day when they are being asked to accept increased pupil loads through the inability of the school boards to increase the personnel of the teaching staff to meet increased enrollments, are provided with adequate tools in the way of books to carry on their work. What is needed today, with this added pupil load, is not less schoolbooks, but more schoolbooks. Pupils must do more work by themselves and with less directional effort on the part of the teacher. No teacher, however able and however willing, can have the number of pupils in his classes increased, say, by so inconsiderable an amount as 10 per cent, and still give to that added number of children that same individual attention which can be given to the smaller number. The same results which held formerly can be had only if the tools with which the teacher is equipped are better than those which he formerly had.

the public. This same public demands a better accounting. Similarly, a public that demands accounts cannot be satisfied with estimates, and so we are faced with a very real task in developing a sound system, one out of which meaningful reports will grow. If the condition of increased costs presses us to a more efficient financial accounting, we should be thankful that we have at last been pressed.

Redirected Support for Education

"A study into the results of attempts to revise systems of state support in recent years will disclose the fact that invariably the call has been for greater state subsidies. These render the state more obligated to take the lead in the reorganization or the establishment of an adequate plan of financial and general educational accounting. One of the greatest needs today in the field of administrative research is the accumulation of data and the development of techniques which will make possible the adequate measurement of the effect of increased and redirected support for education.

"The entire problem is larger than that of financial accounting and must be made to include the whole field of records and reports, although at any one time the particular phase may be the center of interest. Does it not appear necessary that, were any state to undertake a thoroughgoing piece of work in the field of financial accounting, the project should be assured the two essentials of leadership and co-operation? If so, the state which has a strong educational leadership will be most successful, for in that state will dwell co-operation. After all, the system developed, whatever it may be, has to be operated. It is to the local administrative units that we must look for operation. It would seem reasonable, therefore, that there must be real participation on the part of the representatives of these units.

Developing a Plan of Accounting

"The development of a plan of financial accounting amounts to nothing more than the inauguration of a system of financial records. In determining what records are necessary, and how to make them accurate, the work comes in. It will be necessary to go back to the basic local administrative units, and to build up from there the record system. It will be necessary to keep in mind the requirements of research and publicity, the needs of the state educational authorities, and the federal bureau. It will be necessary to study carefully the requirements in the way of related records.

"The pattern for the attack upon the problem must include the later development of a plan of reports to other administrative units such as the county or the state. Not all the records devised are called upon to serve as bases for these reports. Many of them will be for local administrative use. At the same time, the development of a plan for financial accounting cannot be said to be complete until the reporting phase has been considered. In most states, the authority for financial and other accounting now rests with the state, since it is this unit that is responsible for education. A careful consideration of the reporting phase will prevent the neglect of much in records and reports that is essential to research.

"In spite of good intentions, a system of financial records and reports may fail of its maximum good, unless it be accomplished by an interpretive and educational service. Such a service is essential to the inauguration and operation of any system of records and reports, but it is vital in states where as yet those who keep the records and make the reports are neither educators nor accountants. The logical place for this service is in the state department, but wherever it is placed its personnel should be of broad gauge, trained for the work, and alert to the service function.

A State Plan for Financial Accounting

There are those who say that financial accounting is a prosaic subject. These would have you believe that finance has little, if anything, to do with educational method, much less with philosophy. Likewise, work in the field of educational finance, and particularly in its phase known as financial accounting, is often frowned upon by those of prolonged training in professional education and by those who are known as students of education.

Dr. Frank P. Graves, State Commissioner of Education of New York state, in a paper read before the Missouri School Administrators' Association, points out that finance, and particularly basic financial records, are coming to be viewed in a proper perspective, due to the work of administrative leaders, such as Strayer, Engelhardt, Moehlman, and others in graduate schools of education, to the work of a few persons in state departments, and to the contributions of the Department of Superintendence Committee on Records and Reports.

Dr. Graves points out that the hope for the future is to be found very largely in two sources: first, the pressure of conditions both

educational and financial that are beginning to hedge us in, and second, the type of personnel that is becoming interested in the problem and also being placed in general or in immediate charge over finance and financial accounting in state departments and in local systems. He said, in part:

"Speaking on the first of the two sources mentioned in the foregoing, what are the conditions, educational and financial, that are producing the needed pressure? In the first place, we have entered upon an era of educational research that is beginning to feel the need of a dependable source of data. The first quarter of a century has witnessed the birth and a promising progress in educational research. Old workers and new workers are coming to see that basic records that are reliable, pertinent, and timely are more valuable in research than are the questionnaires. Particularly, is this so in the field of administrative researches so largely financial in character.

"Another condition is found in the influence of the increasing cost of public education. As costs increase they become more meaningful to

THE AMERICAN School Board Journal

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Research in City School Systems

RESEARCH departments have become an integral part of the administrative machinery of large city school systems, and, until this past year, more and more cities between 35,000 and 100,000 population have been designating one or more persons to carry on some research or systematic study of educational problems.

The first beginnings in the field of systematic study of educational theories and practices by school boards arose from a very real need. Almost invariably there was need for facts which the superintendent and his associates needed, but which they could not obtain because they were too busy with the immediate duties of their office, and because special knowledge and training were lacking to carry on the studies and to direct clerical help. In employing men and women for research, it was natural that the cities should turn to the colleges for persons who had a full understanding of educational theory and current school methods, and who had both training and some experience in the means and devices of scientific research. The research departments as they were first organized, consisted of men of youthful enthusiasms, and some brilliant achievements were noted in their reports and recommendations. The men were free from the usual pressure of the special interests and established precedents which affect every school executive in his approach to problems and recommendations for solutions. They could find and view facts impartially, and by the application of tested principles and theories find courses of action and indicated procedures. In strongly controversial matters, like teachers' salaries, textbook adoptions, or curriculum changes, they frequently placed in the hands of the superintendent and the school board, data that permitted a given course of action on a plane to which unworthy personal or group interests could not reach.

All important movements in education go through definite cycles of growth and expansion, and frequently elements of strength lead to overemphasis and finally to a decline. Inevitable and complete extinction of an idea then seems to threaten, but ultimately the valuable elements are retained in modified and practical forms. Research just now is in a period of decline because of overemphasis and because the researchers have insisted too strongly upon research *per se*. In numerous communities projects for study have been undertaken that are of no help to anyone but the individual who has carried them on. Vast amounts of statistics have been gathered without any hope of ultimate use in determining school administrative plans or teaching practices. Even usable findings often have been too finespun or too involved to win acceptance from overburdened teachers and hard-headed school-board members. As a result, the reduction of available funds and the necessity of limiting administrative personnel have been seized up by dissatisfied school boards and superintendents as an opportunity for discontinuing research, or for cutting it to a point approaching utter ineffectiveness. It will require a year or two in many communities to gather the remains and to reconstruct a worth-while program.

The safety and permanence of city school research bureaus lies in the redirection of the work and in the acceptance of the original purpose, i.e., of an administrative and fact-finding agency which constantly produces usable results. Common sense must govern here, and pure research must be left where it belongs, in the graduate department of the university. A limited program of scientific research with purely utilitarian ends always in view is vastly better than rule-of-thumb and guesswork to which school boards must resort if all research men are dispensed with.

Prices and Wise Standards

ECONOMIC pressure is bringing home to the vendor of school merchandise the necessity of reduced prices. The buying paralysis which has carried over into the school market from the general industrial markets has reached its lowest point. To adjust, or not to adjust, is the problem confronting all producers of school goods.

School executives as a group are not interested in forcing down the prices of school equipment or supplies. Rarely is the discussion of prices personal or a problem of principle. The matter of curtailed budgets and the adjustments within available amounts of tax money are practical administrative problems from which price adjustments logically follow.

At this turn of the depression, school boards are face to face with the maintenance of American standards of equipment and supplies, or the setting of new standards for the future. Shall accepted ideas of fireproofing and safety of buildings be lowered? Shall experimental progress on readjustments in classroom procedure, management, and operation of schools be stopped? Shall a moratorium on research be declared until things come back?

On principle, the JOURNAL has never believed in the high prices, or extravagant expansion, especially in public education. A private school may follow its own fancies in pupil costs, teaching loads, time schedules, etc. Public schools must be responsible to the public for maintaining a sensible minimum efficiency, without extravagance, waste, or dishonesty in capital investment or operation. Public criticism of public abuse can never be taken from American public life for fear of tyrannical abuse by a willful and even dishonest minority.

To lower standards of education and to expose the schools to the danger of losing the progress of the past ten or twenty years deserves serious consideration. Financial adjustments are now well under way and business recovery, even though slow, seems not far distant. Figures show that the vast majority of the city school systems have the necessary adjustments well under way. The story of almost all cities, without exception, is the story of radical cuts in budgets and salaries, necessitated by curtailed income.

In all adjustment, standards of "efficient economy" must be set up. To attack one item in the budget and harp on a price issue is folly. To fail to make adjustments on principle is an expression of a lack of capacity to meet realities. In public office there is so frequently the mere expediency of "getting by" without defining or facing the issue. Fortunately, the standards of school administration are growing stronger every day.

Unified School and Municipal Elections?

THERE is a growing body of opinion which urges closer contact between the schools and other governmental agencies. In both the cities and in the states at large, it is held by a certain school of political thought, that the educational system in its financial problems and in its election of representatives, should not be considered as a thing apart from the state government, or the local municipal and county government. A statement which reflects this theory was recently made by Mr. E. R. Brown, secretary of the Legislative Committee on Reduction of Governmental Expense, State of Iowa. In part, this statement urges:

"That school and city elections in Iowa be combined, as is being done in numerous cities in this country. The legislative committee has received numerous suggestions that municipal and school elections be combined not only for the purpose of reducing election expense but also to insure a larger vote for school directors, who administer one of the largest single portions of the tax dollar. Investigation by this Committee has revealed that barely 14 per cent of the voters who turn out for presidential elections in Iowa have voted at recent school elections at which large bond issues frequently come up for approval.

"Opponents of the proposal to combine city and school elections, argue that school elections ought to be separate to keep schools out of politics. Supporters of this reform point out that possibly this

isolation of the school boards has been one reason for the enormous increase in school taxes; also, that the schools are not out of politics.

"In fact, the schools in Iowa are represented by at least three of the strongest political organizations in the state, at least two of which are active all the time. And in some of the larger cities politics exert a large influence in school affairs. So 'keeping schools out of politics' is a fallacy.

"Answers to letters sent out by the Legislative Committee on Reduction of Governmental Expenditures to the capital cities of every state in the Union show that, out of 36 replies, 16 reported that city and school elections are held separately; 12 held combined elections on the same day, and in eight other cities the school board is appointed, either by the mayor, the city council, or, in Delaware, by judges. The committee believes that this is quite representative of the country as a whole, because the laws which affect one city in the state are quite likely to be applicable in most of the other cities.

"In Ohio, Vermont, Oregon, Pennsylvania, Nebraska, Georgia, Massachusetts, Missouri, Minnesota and Kansas, in which city and school elections are combined, there are in all probability just as efficient school systems as in Iowa cities where school and city elections are separate.

"In 15 of the 36 reporting cities, school elections are being held annually, in 12 biennially and in one, every four years. In Iowa cities, school elections are held annually. Several years ago a law was passed providing for biennial school elections in Des Moines, which has worked out satisfactorily; but does not go as far as the committee deems sufficient, in view of large bond issues which are voted for by such a comparatively few of the qualified electors."

There is much merit in the suggestion that school elections are too costly and do not provide a true expression of a community's opinion. There is, however, no warrant for the implied suggestion that isolation which school boards and superintendents have sought is responsible for increased school costs or higher taxes. The local school governments are in theory and practice branches of the state, and cannot be merged with municipal governments without serious exposure to an evil type of politics and loss of needed freedom. The isolation of the schools which is now criticized, has grown out of troubles that were prevalent in the eighties and nineties of the past century. It is this isolation that has raised all school administration to levels of economy and efficiency which no municipality has reached. It should not be lost because of clamor that finds a ready ear in these troubled times.

The Normal-School Problem

IN several states the suggestion has been made that the number of teachers' colleges and normal schools be cut down. In a number of cities — notably New York and Chicago — a similar suggestion has grown into a well-defined public demand for the closing of local urban teacher-training institutions.

The public consideration of the matter has come largely from pronouncements of taxpayers' protective organizations who have pointed to the fact that there is a surplus of certificated teachers who are unable to find employment, that numerous graduates of the past two years are still unemployed, and that the continued "production" of teachers will only aggravate the situation. It is further pointed out that these institutions are frequently duplicating the work of colleges and that there is much overlapping of courses and services. Back of the complaint there is, of course, the implied or expressed charge that these schools are wasteful of taxes and cannot be justified without a waste of the taxpayers' funds.

Within the field of education opinion is divided concerning the advisability of continuing the teacher-training institutions on the present basis. The colleges and universities are quite willing to have the wings of the small normal schools and teachers' colleges clipped if this clipping means a relative strengthening of the universities and the growth of their education departments. Some superintendents and principals have been growing noticeably cold in their attitude to the employment of teachers' college men and women as compared with graduates from the universities, especially such as maintain strong education departments. The county superintendents, too, have not been able to favor the small one-year or two-year normal

schools in the employment of country teachers because of the growing competition from the four-year teachers' colleges and the universities.

The problem is one which should not be solved in terms of the present economic difficulties but in terms of a wise policy of higher education. There is no gainsaying the fact that the teachers' colleges have been doing an exceptionally fine job in the field of academic education. The teaching staffs are trained men and women every bit as competent in scholarship as those of the universities and considerably more efficient in teaching method and attention to teaching results. The students are and have been particularly earnest and able and attentive to their work. It is worth noting that the normal schools and colleges have never exhibited to the public those problems of discipline and lack of educational objectives among their students and those exhibitions of professional and scientific eccentricities among their professors which have given the press so many opportunities to point fingers at the universities and colleges.

It would seem that the suggestion for discontinuance of urban and state teacher-training schools should be redirected to well-considered plans for making full use of the splendid organizations and plants which have been built up in the recent decades. This may mean redirection of programs, or limitation of entrance classes, or specialization. It should not mean mere surrender.

School Design and the New Architecture

THE "new" architecture has distinct elements of interest to the designers of American school buildings. The reluctance of architects, particularly official school-board architects, to accept the basic ideas of modernistic design and to apply them to new school buildings must not be laid at the door of these men. The reason must be looked for primarily in the conservatism of school boards and superintendents who, while they might in their private capacities try the newest ideas in building, are unwilling to take public responsibility for principles of plan and methods of construction which have not been fully tested. Perhaps, too, the natural tendency of the school to lag behind in adopting revolutionary theories and new practices in its teaching, is unconsciously reflected in the adherence of the newer school buildings to conventional modifications of the historic styles and the vast predominance of the Georgian or Colonial.

The planning of schoolhouses has for many years centered about the idea of the function of each unit — classroom, shop, auditorium, and special area. In size, shape, and cubic content of the building spaces, the physical and educational welfare of the individual and of the class or larger group and the problems of shifting large numbers of children have been the foremost consideration. Of equal importance have been the instructional processes and objectives involved in the educational program. It seems to be entirely logical that the functional idea should be carried over from the planning of the school building to the inseparable element of the expression and form of the whole, so that the building may reflect in every way its true character. In its final analysis, functional planning and the subordination of all construction and use of materials to the needs of the plan is the essence of *art moderne* in building.

As applied to schools, the modern architecture seems to require more skill than do the conventional styles, because of the subordination of lines to mass, and the necessity of finding in planes and solids the essential decorative quality. More than one of the so-called *moderne* school buildings is little better than the "box car" schools of pioneer days, because the designers have not understood this underlying difference, and what one commentator designates the "supremely intellectual and geometrical" feature of the new style.

That intensely interesting, artistically satisfying, and quite economical schoolhouses can be erected in the modern manner is evidenced in a few cities — Denver, San Francisco, New York, Cleveland — where architects have been given a free hand and the necessary encouragement to make modern schoolhouses look the part.

Ignorance is a fearful foe to freedom; but knowledge without virtue is certain death to the republic. — *Pierce*.

A New Type of Classroom for Junior and Senior High Schools

R. O. Bagby, Classroom Supervisor, and Louis Philippe Smithey, Architect, Roanoke, Virginia

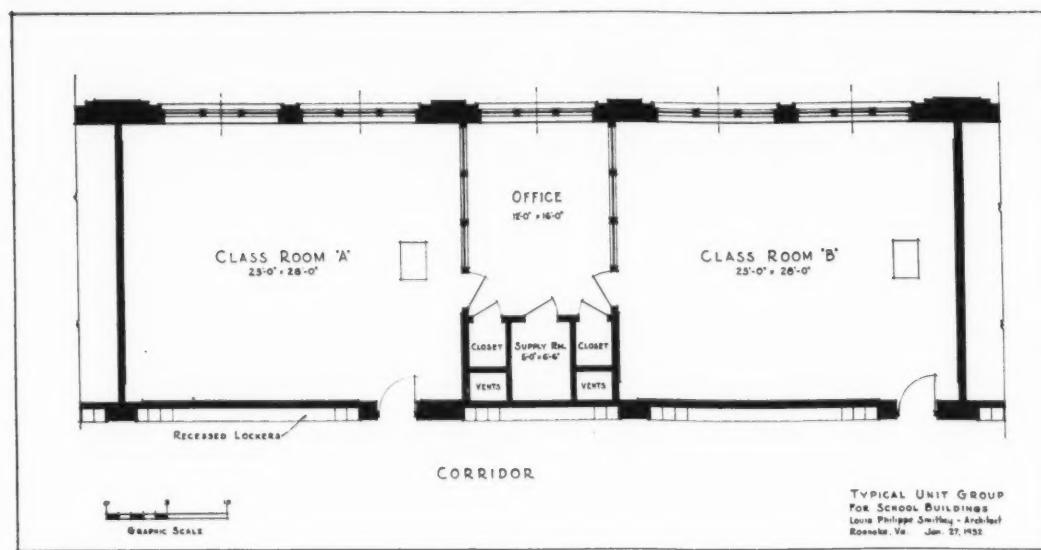
The new classroom of the future for the junior and senior high schools will be larger than at present. In fact, there will be a unit of rooms for the competent experienced teacher. Enough experimental data is now available, for school officials, to indicate the need for a different type of classroom. A number of experiments have shown that the small class is not making better progress in the regular school subjects, but that the large class of from 35 to 45 students has shown equally as good progress. Records checked in Virginia show a slight advantage in favor of the large class.

The Southland is beginning to awaken to the need for improving the type of service offered boys and girls and at the same time stay within the financial means of the states and commu-

the other would serve as a part of the supply and equipment room.

The unit of rooms on this plan makes it possible for the instructor in charge to see the students, from any point he may wish to be at work, in all three rooms at any given time. Such a plan makes it possible, with his assistant, to take at least 60 students at one time. The number could be increased to 75 or 80 students at one time with a superior instructor. Each classroom is to be equipped with movable adjustable desks. The office to be equipped with a large table and chairs, where conferences can be held, also a desk for the instructor in charge, and equipment for the assistant.

While the instructor in charge is working in one room with one group, his assistant will be



TYPICAL UNIT GROUP OF CLASSROOMS SUGGESTED BY THE AUTHORS

nities to pay. This will be accomplished, in part, by a new type of classroom and by giving to the experienced, well-trained teacher the necessary cadet teacher, or assistant to handle the clerical work; also, by providing the necessary working tools and materials. With improved types of classroom procedure, such as the unit assignment, job assignment, problem assignment, coupled with the clear, definite directions for the doing of a learning task, will come the need for a different type of classroom. It must certainly be incumbent upon the classroom teacher and those in charge of the schools to see that the student gets a well-balanced procedure. All of which necessitates the improvement of the learning situation and at the same time do it economically.

In the drawing above, by Louis Philippe Smithey, architect, Roanoke, Virginia, is shown a typical unit group of rooms over which one teacher and his cadet teacher or assistant will preside. Here is shown two classrooms, 23 feet by 28 feet (these could be larger if desired) and in between these two rooms is an office room, or council room, serving both purposes, which is 12 feet by 16 feet. This room could be larger or smaller as desired. The partitions of this room adjoining the two classrooms are glass. These partitions can be built to open up or fold back if it is desired to throw the three rooms all into one large room for any purpose. The closets and supply room are placed next to the inside wall in order not to cut off the light from the classrooms and office. The width of all three corresponds to the width of the office or consultation room. If one closet is all that is needed,

in the other giving out work sheets, assisting the students to secure the necessary reading material from the supply room, assisting in checking the work of the individual students, etc. It gives the competent instructor the opportunity to direct the work on time and as the students need help. He will apportion his time so that he will have an opportunity to listen to the oral reports given by students, floor talks, ask questions, demonstrate new tasks, encourage weak students, and circulate among the students in all three rooms. He has an opportunity to group the students according to the progress they are making in their work. He also directs the work of his assistant. The assistant is a person who can perform all needed clerical work, thus making it possible for the instructor to have mimeographed work as it is needed for the students. The clerk also checks the papers for the different classes and makes the necessary reports to the instructor in charge.

The students are given an opportunity to have a well-balanced procedure of work, such as reading, asking questions, answering questions, taking notes, giving floor talks, formulating problems, solving problems, making out

The sole design of education is not to make a gentleman, or a lawyer, or a mechanic, or a farmer, but to draw out to their utmost limits all the susceptibilities of our threefold nature; and the product of a true discipline is not a scholar, nor a philosopher, nor an artist, but a fully developed man. — Colton.

lines, making summaries, and, in fact, any type of activity that lends to the pupil learning process. In the supply room will be an abundance of reading material and other supplies which will be needed to carry on the work. It should not be necessary for the students to be carrying books back and forth from school and home because all that will be needed as a basis of the work will be in the supply room; other reading material will be in the general library. The supply room is constantly increasing in abundance of valuable material and equipment.

It is proposed that by such a plan the instructor and his assistant will take care of the learning needs of from 240 to 320 students a day. The daily average now is approximately 120 students for one instructor without the clerical assistance. The new plan will double the service and leadership ability. This is made possible by three definite factors; first, the unit type of classrooms; second, the clerical assistance; third, the supplies and other equipment being available as needed.

For illustration: The best teachers in the city of Roanoke, Virginia, receive approximately \$180 a month for nine months. By the plan proposed the services of one \$180 teacher would be released for other service. The question now comes: How should that \$180 be distributed? The answer is something like the following: At least \$80 a month paid to the cadet assistant, \$25 a month for additional equipment and supplies, \$25 added to the salary of the teacher in charge to bring it up to an average of \$150 a month for twelve months, the remaining \$50 a month would be the saving to the taxpayer. Such a plan as this is sound and sane to the person who knows how to direct the learning of growing boys and girls.

A SIMPLE MATERIAL FOR MENDING SCHOOLBOOKS

A. G. Grant, District Superintendent, Mt. Shasta, California

In the fall of 1931, the writer requested the principals of the Siskiyou Union High School District to collect cellophane from packages of merchandise and to bring it to school to be used in mending old books. It was clear from our experience that every effort should be made to lengthen the life of the books and to save the cost of expensive transparent tissue usually purchased for repairing book leaves.

Considerable difficulty was found in the use of cellophane, because ordinary mucilage and library paste do not hold cellophane. The chemistry teachers of the high schools were, therefore, invited to seek as a class project and to develop a suitable adhesive material to be used with cellophane. As a result, Mr. F. D. Calhoun, instructor of the chemistry class in the Yreka High School, worked out with the members of his class a simple formula which has worked successfully and which contains only cheap materials available in any community.

The formula is as follows:

1 gram Knox gelatine
1/2 gram cane sugar
1/10 gram sodium benzoate
25 cubic centimeters of water

The gelatine, sugar, and sodium benzoate are dissolved in cold water and heated to 200 degrees F. The mixture must be well stirred so that it does not burn.

The preparation may be best preserved in a tooth-paste or shaving-cream tube. If the cap is removed from such a tube and it is opened from the bottom, it may be very thoroughly washed with water. The cap is then replaced and the heated solution is poured into the tube. The bottom of the tube is sealed and the material is allowed to cool. Small amounts necessary for fastening a bit of cellophane to a torn page are easily applied by opening the cap.

Von Duprin

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Self-Releasing Fire and Panic Exit Latches

Trustworthy

It is our firm conviction that, in any device on which human life may depend, reliability, sureness of operation, must be given first consideration.

In the new series genuine Type "B" Von Duprins, we have engineered that ideal into devices that are sturdy, durable, reliable. Their operation under any conditions they are called on to meet may be taken completely for granted.

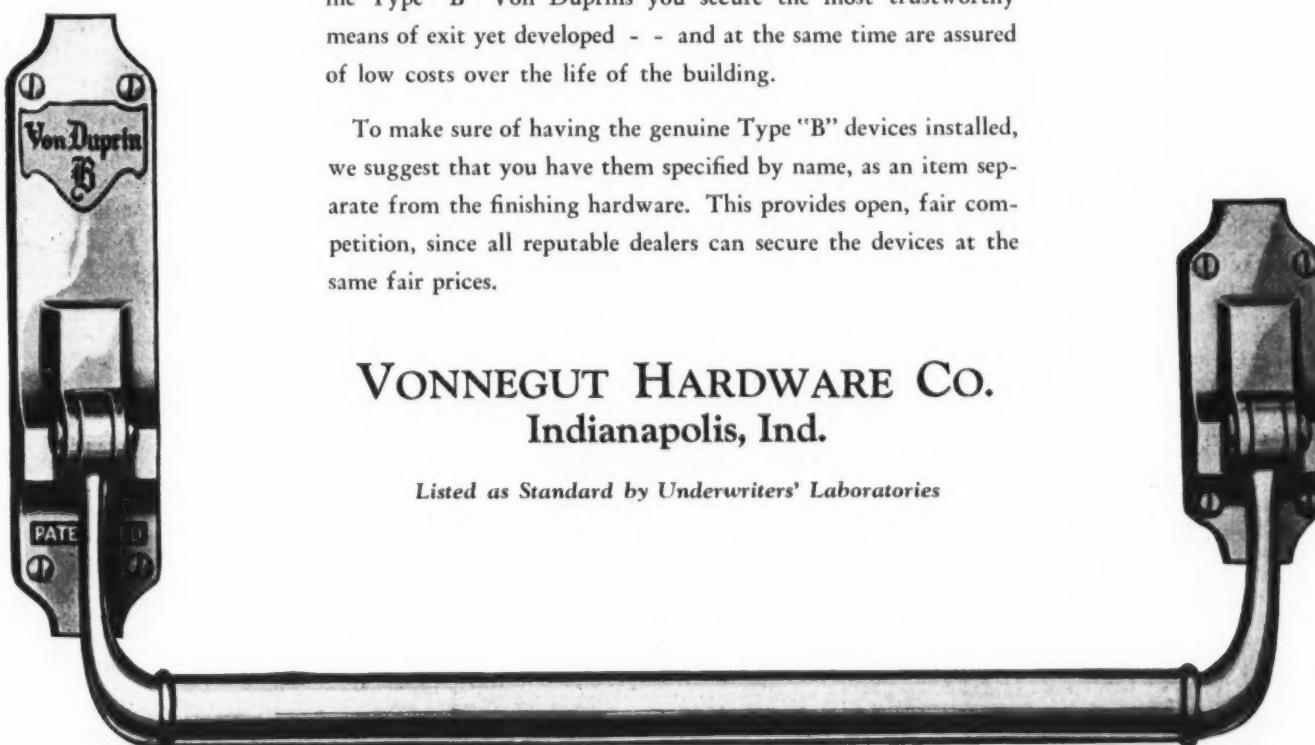
Interestingly enough, the same design that gives these devices their utter reliability, also gives them a length of life, a freedom from upkeep cost previously unknown.

Thus, by asking your architect to specify the new series genuine Type "B" Von Duprins you secure the most trustworthy means of exit yet developed - - and at the same time are assured of low costs over the life of the building.

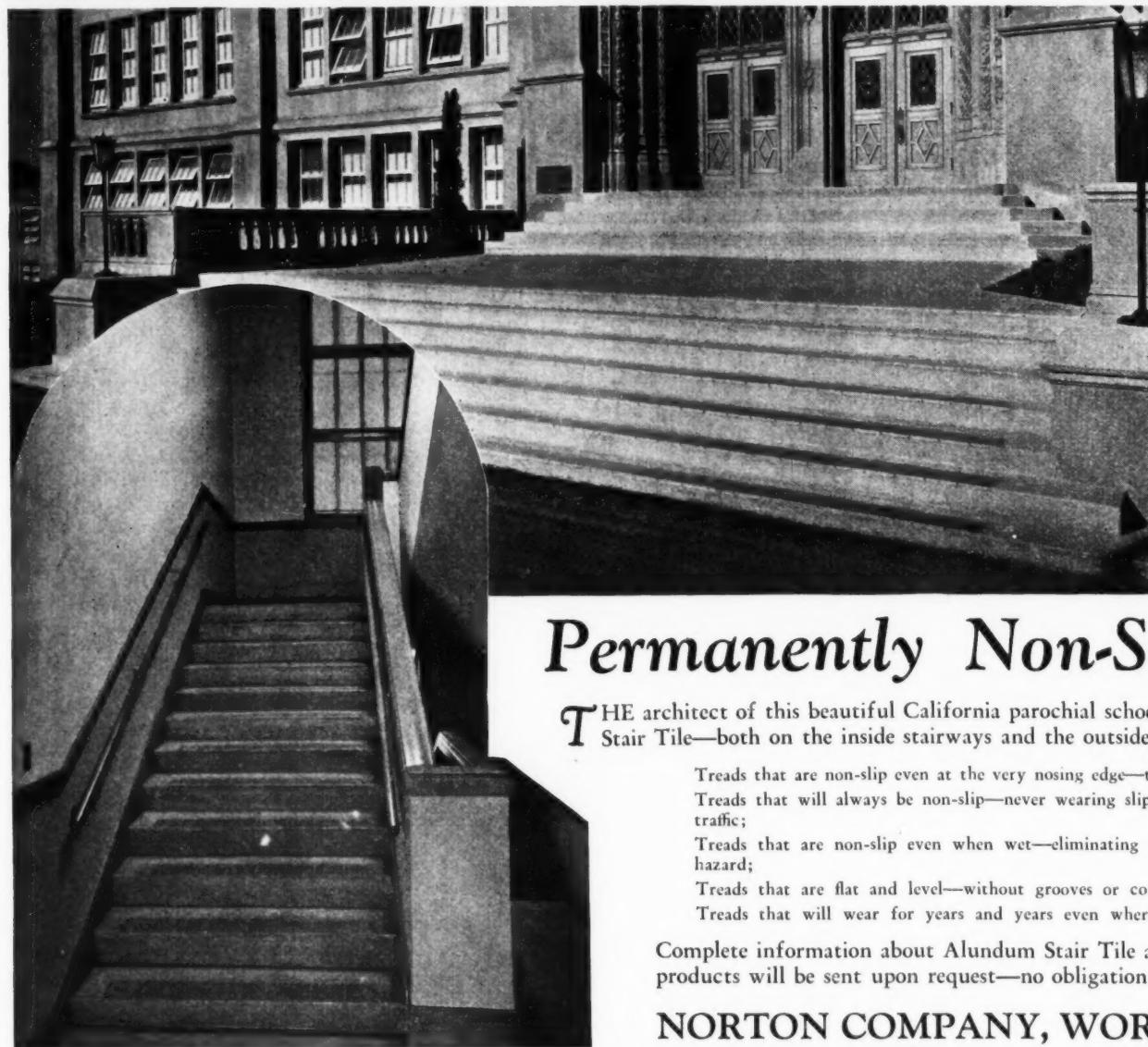
To make sure of having the genuine Type "B" devices installed, we suggest that you have them specified by name, as an item separate from the finishing hardware. This provides open, fair competition, since all reputable dealers can secure the devices at the same fair prices.

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Indianapolis, Ind.

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Catalog 28V shows a Von Duprin device for every purpose and every purpose. Or see Sweet's, Pages C1217-C3219



Inside and Outside
of the Building—



Permanently Non-Slip Steps

THE architect of this beautiful California parochial school used nosings of Alundum Stair Tile—both on the inside stairways and the outside steps—to assure:

Treads that are non-slip even at the very nosing edge—the danger spot;
Treads that will always be non-slip—never wearing slippery under the heaviest foot traffic;
Treads that are non-slip even when wet—eliminating the stormy weather slipping hazard;
Treads that are flat and level—without grooves or corrugations to cause tripping;
Treads that will wear for years and years even where traffic is extremely severe.

Complete information about Alundum Stair Tile and the other Norton Floors products will be sent upon request—no obligation.

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T-315A

School Board News

HOW LEXINGTON MAINTAINED A SELF-SUPPORTING ACTIVITY PROGRAM

In a time of depression and reduced budgets the schools may be criticized for using the taxpayers' money for football equipment and for athletic activities in the high school. The charge of unwise use of school funds cannot be applied to the school board of Lexington, Mo., since the school board does not pay out one cent for athletic or extracurricular activities of students.

During the past year, the school board paid out \$792 for football expenses. This covered the cost of suits, balls, and other items of expense. During the football season, the school took in \$389.20. In most towns the deficit is made up by money from regular school taxes. The local school board refused to permit such a practice so that other means were necessary to make up the difference. The deficit of the past year was made up from receipts of other sports and from proceeds taken in on plays, dances, debates, and entertainments.

During the school year 1931-32, the receipts plus a small balance from the preceding year totaled \$2,701.88. The money was taken in from football and basketball games, open houses, debates, plays, and other forms of entertainment. The expenses of the year amounted to \$2,698.26, leaving a balance of \$3.62 for the year. In this way, it was unnecessary to donate money from the regular school taxes or through the efforts of the school board.

The system has made the high-school activities entirely self-supporting. Not only can the parents and the school board rejoice at the conduct of the season activities on a profit basis, but the merchants as well. Last year the high school did not ask for a single contribution from the local merchants. Neither was there any soliciting for advertising.

The handling of the funds for the activity program is in charge of the head of the commercial department of the school. The student manager does the actual work and the bookkeeping is carried on by one of the students of the commercial department. The books are audited regularly each year by a committee of the board of education.

The Lexington Junior-Senior High School has done what most high schools have been unable to do. It has met the annual football deficit and without the help of appropriations by the school board and the season activity program has been rendered self-supporting. Both of these accomplishments have produced an unusual record for the high school.

SCHOOL-BOARD NEWS

♦ Helena, Mont. The school board has voted to adopt the annual promotion system in place of the semiannual system formerly in operation. The change was recommended by Supt. R. O. Evans and went into effect on September 6.

♦ San Antonio, Tex. Dr. Mary King Robbie, chairman of the child-health committee of the school board, has recommended the employment of a physician for each of the senior, junior, and elementary divisions of the city school system. The adoption of the recommendation would call for a cost of \$8,000 a year, or a reduction of \$6,000 under the cost of child-health work during the past year.

♦ Kansas City, Mo. The board of education has approved the school budget for the next year and has reduced the tax levy slightly more than 5 cents on each \$100 of assessed valuation. The levy for next year is \$1.60, as compared to a rate of \$1.6564 for the past year. The lowering of the tax rate was made possible by a reduction in budget requirements for the year amounting to approximately \$500,000. One of the economies was a curtailment of appropriations to the building expansion fund, which totaled \$450,000.

♦ Portland, Oreg. The school board has defeated a motion for the adoption of the tentative school budget, on the basis that the budget for 1933 without a special tax levy, would be insufficient to balance by \$428,000. The board has appeared to be no nearer a solution of the financial problem than it was last May when the voters defeated a million-dollar special tax levy.

♦ New York, N. Y. Approximately 150 architects and draftsmen in the employ of the bureau of construction and maintenance of the board of education

were dismissed from the service at the opening of the new school year. The action which was taken to cut down the size of the bureau was due to a shortage of funds rather than to a lack of work for these employees. The bureau will be operated with a skeleton staff during the school year, with 22 draftsmen, department heads, and other necessary employees.

♦ Pontiac, Mich. The board of education has issued a new form of contract to the teachers, providing for a readjustment of the salary scale at any time after October, in case the financial condition of the schools requires it. The contract was adopted because of the uncertainty regarding the collection of school taxes during the next year.

♦ Neenah, Wis. The school board has adopted a new policy, requiring that automobiles transporting debaters, band members, and athletes shall carry liability insurance. The action was taken as a result of an accident which occurred recently, when a group of band members went to Crystal Lake.

♦ Fredonia, Kans. The board of education has taken over the books purchased by the high-school book exchange last spring. The books were rented to the high-school students at 25 cents a copy. Students are expected to pay for injuries to books used.

♦ Goose Creek, Tex. The school board has ordered an 8-per-cent salary cut for cafeteria managers. The action was taken to accord with similar action taken in the case of teachers.

♦ Elgin, Ill. As an economy measure the board of education recently voted against postgraduate work in the high school. The action of the board directly affects 100 students who had planned to continue their school-work. A number of other economies have been planned which will effect a total saving of \$75,000 in school expenditures for the year.

♦ Chicago, Ill. The board of education has unanimously voted to maintain operation of the Crane Junior College and Chicago Normal College, without charging tuition to students. It was agreed that, if insufficient funds are obtained to meet the deficit of the two colleges, all schools in the city will be closed for one day in the year. The enforced closing, it was estimated, would effect a saving of \$200,000, which would be more than sufficient to meet the deficit. The tuition proposal was presented to the school board several months ago as an economy measure, but was rejected upon the motion of Mr. J. P. Savage, a member, who suggested the alternative plan of closing the schools, at the beginning or end of the Christmas vacation.

(Concluded on Page 50)

BETTER DISH WASHING

These are the results guaranteed when Wyandotte Cherokee Cleaner is used for machine dishwashing:

1. Cleaner dishes at lower cost.
2. Dishes free from brown or black stains.
3. Aluminum dishes and utensils free from discoloration.
4. Bright and sparkling glasses and silverware.
5. No scale formation in dishwashing machine.

With no obligation to you, one of the Wyandotte Service Men will be glad to demonstrate these results.



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They are mechanically perfect as well.

Roller Chain drive provides positive action. Electric drive can be provided where desired.

3

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EVERY NEED

Choice of three types—overhead or floor support. Choice of insulated or non-insulated construction.

Sealing at joints, top, and floor line further retards the passage of sound. Choice of 12 types of surfaces.

In many widely varying installations, these doors have proved their *dependability*. Write today for complete facts.

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625 S. 25th Street, Newcastle, Ind.

Also manufacturers of Circle A Sectional Partitions, Rolling Partitions, School Wardrobes, Steel or Wood, Portable or Permanent Bleachers and Grandstands.

(Concluded from Page 48)

♦ St. Louis, Mo. Boys who live within a mile of their grade schools were not given car fare from the school fund, beginning with the new school term in September. The change in policy was made, because the school-board members believe that a healthy boy or girl is able to walk two miles to school each day in return for an education.

♦ Owosso, Mich. The school board has approved a new program of physical education for the city schools, with emphasis on intramural sports. Under the plan, the head coach has been replaced by a special teacher, who will direct the regular teachers. It is the purpose of the new program to interest all boys in sports, to the extent that each one may participate in one or more activities during the year.

♦ Murphysboro, Ill. The school board has approved a new plan of administration for the township high school. The new plan, known as the unit system, provides for a program of five periods, each 65 minutes in length. All pupils are in recitations for 40 minutes, and remain with the same teacher for 25 minutes of supervised study. In addition, each pupil has one 65-minute study period during the day, which is spent in the library. Under the plan, all pupils do practically all of their studying in school and receive individual guidance and attention.

♦ Rockford, Ill. The school board has reduced the tuition for nonresident high-school pupils from \$140 to \$130 a year. Pupils in the junior high school will pay \$110 each, and those in the elementary schools \$80 each.

♦ South Bend, Ind. The school board has adopted a new policy, requiring that the evening school shall become self-supporting. During the past year, a nominal tuition fee of \$1 was charged, but the school board was obliged to meet an expense of \$5,000. This year it is planned to raise the tuition fee to meet the total cost.

♦ Logan, Iowa. The school board has made arrangements with two of the local drug stores for selling textbooks to pupils at greatly reduced prices. Books may be purchased at cost, plus a minimum handling charge.

♦ Oakwood, Ohio. The school board has reopened the schools for the new school term in the face of a delinquency in taxes of more than the estimated 20 per cent. The budget for the year had been set up on an estimated 80 per cent tax collection and the county auditor reported that the collection had fallen below 50 per cent.

♦ Virginia, Minn. The board of education has adopted a resolution, placing all common and skilled labor employed in schoolwork on a split-time basis, and permitting the employment of additional men and women on a similar basis. The new policy, which went into effect on September 1, is an effort to relieve the local unemployment situation and affects practically all forms of school labor.

♦ Antigo, Wis. The school board has approved a plan of postgraduate study, which is to make it possible for high-school graduates who cannot go to college, or find employment, to continue in their high-school work. The plan makes provision for those who desire to do university extension work, to use the study halls and library facilities. Postgraduate students must make written application at the principal's office and the number to be admitted will be limited to the capacity of the rooms in which the courses are taken.

♦ Summit, Ill. The public schools were opened on September 12, instead of October 1, as had been previously planned by the school board. The board has adopted a drastic economy program, providing for a 10-per-cent cut in teachers' salaries, a shortening of the school year, and the elimination of art and music supervisors. Although salaries are several months in arrears, it is believed that payment of salaries will be made with the coming of improved financial and economic conditions.

♦ Virginia, Minn. The school board recently ordered a 10-per-cent salary cut for all employees of the clerk's department, including stock clerks, bookkeepers, assistant clerks, and stenographers. The board had previously ordered reductions for the members of the teaching staff and for two members of the board.

♦ Dr. Warren W. Coxe, director of the educational research division of the New York State Education Department, has recently made a report on a study of the need for more adequate grouping of high-school pupils so that curriculum adjustments may be made more effectively. Dr. Coxe declared that there is a wide range of ability in each curriculum and that this had led to the practice of making certain curriculums easier. Traditionally, high schools have been selecting agencies, offering training only to the superior pupils—those planning for college entrance. It is evident from the data presented that the high schools of New York have abandoned the idea, even though the idea itself may still persist.

♦ Independence, Iowa. The public schools have been reorganized on the six-three-three plan for the present

school year. The Lincoln School, formerly used as an elementary high school, has been converted into a junior high school. The manual-training shop has been transferred to the Lincoln School for the use of the junior-high-school students, while the mechanical-drawing and printing departments have been installed in the senior high school.

♦ Topical commencement programs are to replace the stereotyped commencements in many Pennsylvania schools, according to a recent statement of the department of public instruction. This year the topic as the theme of programs was the Washington bicentennial celebration. Next year the landing of William Penn in Pennsylvania will form the theme around which the new type of program will center.

♦ The public schools of Eagle Grove, Iowa, opened on September 12, with a total enrollment of 1,170, including 416 in the high school, 502 in the grades, and 167 in the junior college. It was necessary to enlarge classes in the high school, due to an increase in enrollment in Class A tuition pupils and the discontinuance of the Sacred Heart High School.

♦ The senior high school at Framingham, Mass., opened on September 7, with the largest enrollment in its history. A total of 806 students were enrolled and all were taken care of without an increase in the teaching staff.

♦ Robinson, Ill. An open-house day for parents of school children was held on Labor Day. During the day a number of exhibits of schoolwork at the recent state fair were on display. The schools sent exhibits in five subjects to the fair, scoring first or second in all of the work. The work was done by pupils in grades one to eight.

♦ A reorganization of the Kentucky State Education Department has been recommended by James H. Richmond, state superintendent of public instruction. Plans for the reorganization are not complete, but it is expected that final action may be taken late in the fall.

♦ A movement has been begun in Wisconsin to revive the legislative reorganization of the state educational system, under the united efforts of the committee of the Wisconsin Teachers' Association and the Wisconsin Association of School Boards. The committee has agreed upon a program of efficiency and economy in education and is pledged to promote the passage of the state education bill which was defeated at the last legislative session. This bill calls for a board of fifteen members, to be created under the department of state, and to include the state superintendent as executive officer of the board.

Unbalanced

Reflected glare: Should be only a diffused horizontal light.



Direct glare: Young eyes should have "helpful" light from above.



Shadows: deep and sharp, instead of flat, "smooth" and subdued.



Maintenance: Complicated. Glass-changing should be easier.

Balanced Lighting

Vision is at its best when all the many lighting factors are "balanced."

What balanced lighting means to a child . . .

The difference between Balanced Lighting and *unbalanced* lighting may mean the difference between brilliant progress and apparent stupidity. Many so-called "backward" children are not backward at all; they work poorly merely because they work in poor light. They need Balanced Lighting.

The idea of Balanced Lighting is built not simply around a lighting unit, but around the lighting conditions that must be met. An efficient vertical light must fall on the work, but there must be no dazzling direct glare. There must be a gentle, horizontal light rather than trying reflected glare to strain young eyes unduly. There must be soft, restful shadows instead of hard annoying ones.

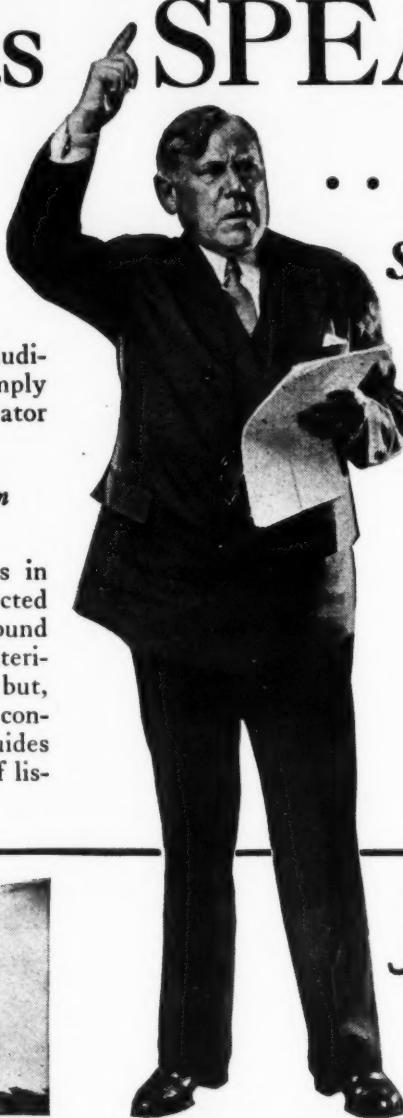
Each installation, of course, requires a different balance of conditions. A Graybar lighting specialist is available to help you secure the right balance for your particular needs.

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EXECUTIVE OFFICES: GRAYBAR BLDG., N. Y.

Your Patriotic Duty — Vote This Year!

Senator "X" was SPEAKING



... but no one
seemed to care!

SENATOR "X"—the finest orator in the state—had come a long way to address the school. He had an important message for the pupils—and the Principal was anxious for them all to hear it.

But no one seemed to be listening. The auditorium was full of restless movement, incessant whispering that teachers were powerless to check. For once, the Senator felt that he had lost the attention of his audience.

The cause was not lack of interest or bad discipline . . . it was

the faulty acoustics of the auditorium! Half the school simply couldn't hear what the Senator was saying!

Johns-Manville Ushers in Quiet at Low Cost

Faulty acoustical conditions in your auditorium can be corrected by the installation of J-M Sound Control Treatment. This material not only absorbs noise, but, by eliminating echoes and controlling reverberation, it guides wanted sounds to the ears of listeners.

One of the most beautiful and modern of university buildings—the University of Washington Aerodynamics Hall—has been treated throughout with J-M Sanacoustic Tile. In the auditorium shown here, speech can be heard clearly in every seat.



Now available at lower prices than ever before, J-M acoustical products cost little more in new buildings than ordinary noise-reflecting materials. Or they can be applied successfully to existing ceilings and walls at a reasonable cost.

A Johns-Manville acoustical engineer will be glad to make recommendations for modernizing your school auditorium acoustically. For further information, address Johns-Manville, 292 Madison Ave., New York City.

Johns-Manville



**SOUND CONTROL
TREATMENT**

Personal News of Superintendents

DR. NUTTALL HEADS SALT LAKE CITY SCHOOLS

Dr. Leonard J. Nuttall, Jr., who was recently elected superintendent of city schools of Salt Lake City, Utah, was formerly professor of education and director of training schools of the University of Utah. Dr. Nuttall succeeds the late George N. Child and will complete Mr. Child's unexpired term ending in June, 1934.

Dr. Nuttall, who is 45 years of age, is a native of Salt Lake, having been educated in the Brigham Young University High School and Normal School. After graduating from the Normal School, he entered Brigham Young University, later attending Columbia University, from which he was graduated with the degree of bachelor of science in 1911. In 1912 he received the degree of master of arts.

Dr. Nuttall was an instructor and principal during the period from 1906 to 1916. In 1916 he became superintendent of the Iron county school district, and in 1919 he was in charge of the Nebo district. From 1922 to 1930 he was dean of the College of Education of Brigham Young University. In 1930 he resigned to become professor of education and director of the training school at the University of Utah.

PERSONAL NEWS OF SUPERINTENDENTS

♦ MR. W. C. JACKMAN has taken up his duties as superintendent of schools at Rock Rapids, Iowa. Mr. Jackman was superintendent at Wakefield, Nebr., for the past seven years.

♦ MR. C. B. HARTSHORN has been elected superintendent of schools at Hiteman, Iowa, to succeed J. E. Curtis.

♦ MR. A. O. TATTING has been elected superintendent of schools at Silver Lake, Minn., to succeed A. E. Nelson.

♦ MR. Z. M. WALTER, of Hillsboro, Ohio, has accepted the superintendency at Wyoming, and has been succeeded at Hillsboro by Mr. E. E. Holt, formerly of Georgetown, Ohio.

♦ SUPT. R. L. JONES, of Memphis, Tenn., has entered upon his eleventh year of service in the city schools.

♦ JOHN H. STEINER, superintendent of schools at Quincy, Ill., since 1923, died at his home in that city on August 30, after an illness of a year. Mr. Steiner,

who was 58 years old, had been associated with the schools of Adams county for forty years, serving as principal, county superintendent, and city superintendent. He died before the completion of the new million-dollar high school for which he was largely responsible.

♦ MR. G. H. MARSHALL, of Augusta, Kans., has been elected superintendent of schools at Ottawa.

♦ DR. A. B. HALL, former professor of political science at the University of Wisconsin, and president of the University of Oregon since 1926, has resigned the presidency, effective December 31.

♦ MR. E. P. REEVE, formerly superintendent of schools at Wyoming, Ohio, has taken up his duties as principal of the Hyde Park School and the Kilgour School, Cincinnati.

♦ MR. L. J. EAST, formerly principal of the Harvard Park School at Springfield, Ill., has become superintendent of the city elementary and community high schools at Lebanon, Ill.

♦ MR. D. G. SIMKINS, of Vanlue, Ohio, has been elected superintendent of schools at Mt. Cory, to succeed A. J. Hooley.

♦ MR. C. H. VAN ATTA has been elected superintendent of schools at Vanlue, to succeed D. G. Simkins.

♦ MR. J. C. COPELAND, of Van Buren, Ohio, has been elected superintendent of schools at West Milton.

♦ MR. P. V. BROWN, of Barnesville, Ohio, has been elected superintendent of schools at Tiffin.

♦ MR. RUSSELL H. ERWINE, of Akron, Ohio, has assumed the superintendency at Steubenville.

♦ MR. A. A. SMITH, of McGregor, Iowa, has become head of the schools at Hayward, Wis.

♦ MR. L. W. FULTON, of Viroqua, Wis., has been elected superintendent of schools at Oconto, to succeed W. C. Hansen.

♦ MR. M. F. WORTHMAN has been elected superintendent of schools at Decatur, Ind., for a three-year term.

♦ MR. W. B. CORRY, of Clifton, Ohio, has been elected superintendent of schools at London, to succeed H. F. Kauber.

♦ MR. J. A. LINEBARGER, of Indianapolis, Ind., has been elected superintendent of schools at Frankfort. He succeeds J. C. Stott, who held the office for the past ten years.

♦ MR. L. E. MICHAEL, of Clinton, Ind., has been re-elected for the new school year.

NEWS OF SCHOOL OFFICIALS

♦ MR. C. J. ROSE and MR. W. F. FETTERS have been elected as new members of the school board at St. Cloud, Minn.

♦ MR. A. L. MOORE has been elected a member of the board of education at Pontiac, Mich. Mr. Moore succeeds James H. Lynch.

♦ DR. PAUL MONROE, director of the International Institute of Teachers College, Columbia University, has been appointed president of Robert College and of Constantinople Woman's College in Istanbul, Turkey.

Dr. Monroe is the fourth president of Robert College, which was founded in 1863 by Cyrus Hamlin, who served as president until 1878. The college has an enrollment of 700 students from all parts of the Near East.

Constantinople College was founded by Dr. Mary Mills Patrick, who devoted fifty years of her life to the education of women in the Near East.

♦ MR. FREDERICK C. BEYER, an employee of the school board of Cleveland, Ohio, for the past twenty years, has retired from school service. Mr. Beyer entered the school service in 1912 as secretary to Supt. J. M. H. Frederick. In 1926 he was made assistant commissioner of records and special services.

♦ MR. J. T. NORRIS has been appointed superintendent of buildings and purchasing agent for the board of education at Chattanooga, Tenn.

♦ MR. O. Y. SMITH, 59, secretary of the school board of West Aurora, Ill., died at his home on August 25, after a short illness.

♦ MR. THEODORE H. SCHOENWETTER has resigned as secretary of the board of education of Santa Monica, Calif., after a service of ten years. Mr. DAVID FAWCETT has been appointed to succeed Mr. Schoenwetter as secretary.

♦ MR. MICHAEL J. SHANNON, chairman of the school board, Framingham, Mass., died suddenly during the summer. Mr. Shannon was formerly principal of the Lincoln Junior High School, and had been a member of the school board for three years, and chairman for two years.

♦ MR. WILLIAM A. KUNKEL, JR., has been elected as secretary of the board of education at Bluffton, Ind. Mr. Kunkel succeeds Mr. J. F. Meyers, who had held the office for six years.

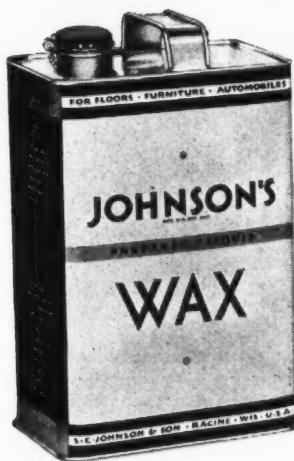
♦ MR. JOHN B. WYNKOOP, business manager of the board of education, Bridgeport, Conn., has been re-elected for the coming year.

♦ MR. CLARENCE APPLEGATE has recently accepted the position of superintendent of maintenance for the board of education of Evansville, Ind., with a salary of \$3,000 a year.

Why WAX?

QUESTION • Why use genuine wax on floors?

• **ANSWER** Because genuine wax gives longest-lasting protection on the one hand—and unequalled, rich, mellow beauty on the other. And because, in addition, the genuine-wax maintenance method is least expensive in the long run.



- If any manager or superintendent is in doubt about the advantages of genuine-wax maintenance, two simple courses are open to him.

- First, he can easily find other managers who have used wax and are using it now. He can talk with them, and *see their floors for himself*. He can study their cost figures.

- If he does this, he will undoubtedly adopt the genuine-wax method for his own floors.

- There is a second way to find out. He can try it out himself, without expense. He can clip the coupon below, and receive *Free of Charge* a full size can of genuine Johnson's Wax. When he has tried this on his floors, he will at least have a fair idea of why wax has given such enduring satisfaction over so many years.

- And when he has become a regular wax user, he will understand why we say "For the greatest possible protection and the richest beauty use genuine Johnson's Wax."

USE GENUINE

JOHNSON'S WAX •
FOR ENDURING FLOOR PROTECTION AND BEAUTY

S. C. Johnson & Son, Inc., Dept. SJ10 Racine, Wisconsin • Please send me a free can of Johnson's Wax.

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School Finance and Taxation

NEW YORK CITY SCHOOL COSTS

The New York City schools cost the city \$160,000,000 during the year 1931, according to the annual report of the board which has just been issued. About \$20,000,000 represents the capital outlay for the acquisition of sites, construction of buildings, and purchase of furniture.

For each child in the elementary schools, the cost of instruction rose to \$105.11, as compared with \$102.84 in 1930, making a per-capita cost of 12 cents an hour for elementary pupils. In the senior high schools, the per-capita cost decreased from \$170.83 in 1930 to \$161.95 in 1931, making a per-capita cost of 17 cents.

The total cost of the school plant grew during the year to \$466,782,416. Of this, \$80,000,000 was used for new sites, and \$386,500,000 for new buildings and equipment. In 1921, the total cost of the school plant was \$180,000,000.

Repairs to buildings and equipment cost a total of \$3,986,752 in 1931, while repairs to equipment alone came to \$616,951.

Daily attendance at day elementary and junior high schools averaged 820,675, as compared with 815,515 for the preceding year. The senior-high-school attendance increased from 147,556 in 1930 to 167,609 in 1931. Of the high schools, Queens had the largest attendance increase, 22.4, and Manhattan was second with 12.46.

FINANCE AND TAXATION

♦ Struthers, Ohio. The school board has adopted a plan for operating the schools on full time during the school year. In case of an emergency due to lack of funds, the board may cut the term to eight months. All teachers suffered a reduction of 15 per cent in salary. The total savings through salary cuts and other economies will amount to \$43,000.

♦ Elkhart, Ind. The school board has proposed an increase in the school-tax levy for next year to meet a shortage in funds due to a lowering of the assessed valuation of city property. All teachers have suffered a reduction of 10 per cent in salary for the school year.

♦ The board of education at Kalamazoo, Mich., has adopted a budget of \$1,390,200. It will be necessary

for the local authorities to raise \$943,000 by direct taxation. For the school year 1931-32 the board spent \$1,911,876 so that the new budget represents a substantial reduction. The board closed its last fiscal year with a total cash balance of \$65,000.

♦ Minneapolis, Minn. The school board has adopted a budget of \$7,792,519 for the school year 1932-33, as compared with an estimated total of \$7,991,143 for last year. The budget is \$678,209 less than the original estimate and represents a reduction of \$198,624 from the last year's estimate. The reduction was accomplished by a 10-per-cent reduction in salaries and by other necessary economies in school expenditures.

♦ St. Paul, Minn. The revised budget for the municipal government provides for a reduction of \$959,094 in city expenses, or a little more than 10 per cent. Among the economies to be effected as a result of the reduction in the budget are the elimination of kindergartens, a 10-per-cent salary cut for teachers and school officials, a transfer of the school health activities to the health department, and a substantial reduction in school-building expenditures. It is anticipated that the school budget will be reduced from \$3,546,669 to \$3,005,886 during the school year.

♦ Kalamazoo, Mich. The school board has authorized a loan of \$165,000 to be used in meeting payrolls and other current expenses until October 1.

♦ Muscatine, Iowa. The school board has proposed a tentative budget for the 1933 school year, calling for an appropriation of \$222,000, as compared with \$232,555 for the past year.

♦ Wichita, Kans. Dissatisfied with the budget of the schools for the next year, the committee on taxes of the local Chamber of Commerce has asked the board of education to make a reduction in keeping with the times. The Chamber cited that a reduction of only 8.35 per cent had been made for operating expenses for the year. The new annual budget called for an appropriation of \$2,032,000, of which 80 per cent is for salaries.

♦ Manitowoc, Wis. The school board has proposed a nine-month term for the city schools during the school year 1932-33. The change would effect a saving of approximately \$25,000 in teachers' salaries. The board has adopted an economy program, calling for a curtailment of school expenses and a cutting of items where necessary.

♦ The school board of Knoxville, Tenn., has asked the city for authority to borrow \$1,000,000 from the Reconstruction Finance Corporation for the building of new schools.

♦ Dayton, Ohio. The board of education has offered

to coöperate with the county auditor's department in an effort to collect delinquent taxes. The action was proposed in an effort to obtain funds sufficient for operating the public schools on a full-time basis.

♦ Fremont, Ohio. The public schools require an appropriation of \$299,956 to meet operating expenses during the year 1933. A drastic reduction in school expenses has been made by a reduction of teachers' salaries to the extent of \$28,000.

♦ Pontiac, Mich. The annual budget of the school district has been reduced from \$1,680,750 to \$1,308,000 for the year 1932-33, which is a saving of \$372,750. The saving was accomplished by reducing the amount of the sinking fund for retirement of bonds, and by making an average cut of 15 per cent in teachers' salaries. A sliding scale of salary reductions was adopted, ranging from 4 to 20 per cent, based on the salary group to which the teacher belonged. The superintendent and assistant superintendent voluntarily accepted a 20-per-cent reduction in salary for the year.

♦ Huron, S. Dak. The school board has adopted a budget of \$203,615 for the school year 1933, which is a reduction of \$31,617 from the appropriation for last year. The budget provides for a tax levy of \$162,960, which is \$30,056 less than last year's levy of \$193,016. The reduction in tax revenue is slightly more than 15.57 per cent.

♦ San Antonio, Tex. A budget of \$1,700,000 has recently been adopted by the board of education for the school year 1932-33. The budget represents a decrease of approximately \$1,000,000 in expenditures, as compared with those of last year. The salary schedule, which amounts to approximately \$1,450,000, has been cut by \$900,000 for the school year, as compared with \$2,291,966 appropriated for the past year. The salary schedule provides for graduated reductions, ranging from 33 per cent for smaller salaries to 41 per cent for larger salaries.

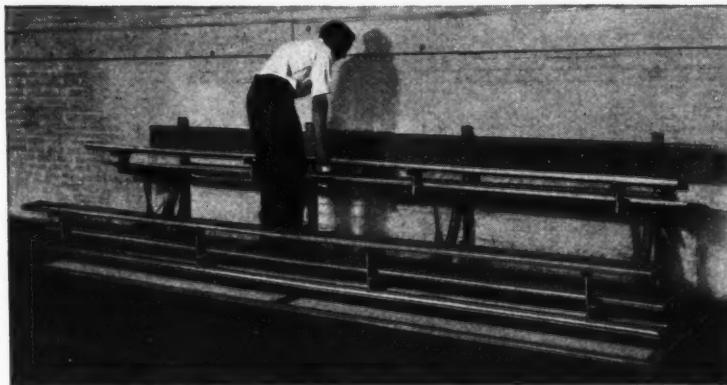
♦ Clinton, Ind. The school board has adopted an economy program, providing for a 10-per-cent salary cut for teachers and janitors, a reduction in insurance costs through a reorganization of the insurance program, and substantial savings in maintenance and operation through careful purchasing.

♦ Iron River, Mich. The school board has adopted a budget, calling for an appropriation of \$138,729 during the 1933 school year. Of the total, \$100,729 will be raised by taxation. Last year the budget totaled \$208,100, of which \$163,000 was levied in taxes. The tax rate for 1933 will be \$10 for each \$1,000 worth of property, as compared to a rate of \$13.70 for last year.

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♦ La Crosse, Wis. The tentative 1933 school budget has been set at \$457,136, which is a reduction of \$17,100 from that of last year. The budget does not include any salary changes, the reductions being made in the several school departments.

♦ Escanaba, Mich. A budget, calling for an expenditure of \$264,431 for the year 1933 has been adopted by the school board. Of the total budget, \$124,973 will be raised by taxation. The school-tax rate for the year has been set at \$14.80 for each \$1,000 of assessed valuation, as compared with \$17 for last year.

♦ Dayton, Ohio. The public schools are being operated this year on the three-day-a-week basis for high schools, and a half-day basis for grade schools. Teachers' salaries have been cut 12 per cent. The schools were opened three weeks later in September because of a lack of funds due to tax delinquencies.

♦ Minneapolis, Minn. The 1932 expenses of the public schools were lowered by \$466,000 during the past summer, by cutting \$258,120 from the December pay checks of school employees and by reducing expected expenditures a total of \$207,879. The new cuts are based on the estimation that 9.6 per cent of the city's taxes will be uncollected. This pay cut is separate from the pay reduction proposed by the school board for 1933.

♦ Joliet, Ill. The school board has proposed further reductions in the operating costs of the city schools to meet a reduced budget. Instead of a salary cut, the school board has proposed a shorter school term to effect the necessary economy.

♦ Cleveland, Ohio. The board of education will effect a saving of \$3,000,000 during the period from July, 1932, to July, 1933, according to Mr. James Metzenbaum, a member of the board.

♦ Lafayette, Ind. The school board has ordered further reductions in the 1933 school budget, amounting to a decrease of 19 cents in the tax levy. The new budget represents a saving of \$106,000 from that of 1932.

♦ Auburn, Ind. The operating expenses of the city schools for the new year have been reduced from \$130,000 to \$113,000, with a saving of \$17,000. The saving was accomplished by salary cuts and by other economies in operating expenses.

♦ Elkhart, Ind. The school board has proposed a reduction of 4 cents in the school-tax levy for the year.

♦ Fort Worth, Tex. A new economy program has been adopted for the schools during the present school year. The economies call for a drastic reduction in operating expenses through the employment of fewer

teachers, the performing of part-time teaching duties by principals and vice-principals, and an increase in kindergarten tuition.

♦ Manitowoc, Wis. The school board has ordered longer vacation periods during the present school year, to reduce the school term to nine and one-half months and to prevent further pay cuts for teachers. The usual Christmas vacation will be extended two weeks and the schools will be closed for longer periods at Easter and Thanksgiving. The savings in fuel, light, and supplies will reach \$3,000.

♦ La Crosse, Wis. The 1933 school budget has been fixed at \$457,136, which is a reduction of \$17,110 from the 1932 budget. A saving of \$2,240 was effected by the elimination of the summer school.

♦ Newton, Mass. Supt. U. G. Wheeler, of the city schools, in his recent annual report to the school board, presented a plan to effect a compromise between rapidly increasing services performed by the schools and necessary economy. A survey conducted by a sub-committee of the school board, covering the entire school system for the purpose of making improvements and saving money, will result in recommendations to be reported during the fall term.

Members of the committee predict that the teaching load will be brought back to the figure of 32 students to a class as it existed in 1928. Certain vacancies in the teaching and supervisory forces will be left open to reduce the salary expenses. Transfer of duties and reorganization of the department will provide for the duties of the resigning teachers.

♦ School teachers of New York have united in an effort to protect the city schools against false concepts of school economy. Mr. Augustus Ludwig, president of the Brooklyn Teachers' Association, in a recent statement, gave warning that the battle for free schools has not yet been won. "Let us not deceive ourselves," he said. "In our country today many influences are active that seek to undermine the foundation of the schools. Whenever economy had to be practiced, the schools were the first to become affected."

Continuing, Mr. Ludwig said, "Shall the schools be sacrificed on the altar of economy and retrenchment? Shall the children be the innocent sufferers for the sins of extravagance? Are automobile highways more important than schools?"

In conclusion, Mr. Ludwig pointed out that the fight for economy is on. There are many who are willing to sacrifice the schools. Let us be men and women in accepting the challenge. The children look to us to save them from a false economy.

THE TREND OF THE BONDED INDEBTEDNESS OF 289 CITIES

A tabulation giving the total gross bonded indebtedness of 273 cities in the United States and 16 cities in Canada, has recently been prepared by Mr. C. E. Rightor, of the Detroit Bureau of Governmental Research.

The trend of municipal debt is found by Mr. Rightor to be slightly upward, for the 219 comparable cities included in the analysis. The per-capita debt was \$109.04 for 1931, and \$114 for 1932, an increase of \$4.96, as compared with an increase of \$4.92 one year ago. Of this total, 114 cities reported a reduction. All but six of the 24 cities in the first two census groups (300,000 and upward) reported increases, while the smaller cities predominated in reporting reductions. The trend over a four-year period, for 73 comparable cities in the first three census groups (100,000 and upward) shows an increase in per-capita debt from \$92.84 in 1929 to \$100.66, \$106.65, and \$113.97, respectively, in the next three years. The general upward swing was found to be common to each census group and to each year.

The report indicates the total bonded debt for public schools in each of the 309 cities of the United States. These are listed by states as follows:

Alabama	11,163,000	Missouri	29,134,000
Arizona	1,731,000	Nebraska	13,257,186
Arkansas	3,284,000	New Hampshire	2,017,038
California	115,737,975	New Jersey	95,016,780
Colorado	12,239,500	New York	472,527,199
Connecticut	19,292,099	North Carolina	5,777,000
Delaware	986,000	Ohio	118,020,618
Florida	14,958,750	Oklahoma	8,333,200
Georgia	8,162,200	Oregon	10,177,847
Illinois	36,367,065	Pennsylvania	147,891,509
Indiana	31,966,500	Rhode Island	17,813,000
Iowa	14,500,500	South Carolina	1,610,750
Kansas	5,431,000	South Dakota	1,382,000
Kentucky	12,256,400	Tennessee	8,234,000
Louisiana	8,050,000	Texas	46,932,450
Maine	560,000	Utah	5,205,000
Maryland	28,032,274	Virginia	17,767,893
Massachusetts	41,120,450	Washington	16,116,860
Michigan	117,299,476	West Virginia	3,779,500
Minnesota	34,836,952	Wisconsin	23,262,000
Mississippi	1,169,041		

School Administration in Action

A PLAN FOR RETIREMENT INSURANCE OF TEACHERS

The board of education at Lead, South Dakota, at its meeting of March, 1932, adopted regulations, requiring all teachers in the Lead schools to carry retirement insurance or its equivalent before becoming eligible for reelection. In connection with the regulations designed to put the plan into effect, the board of education, through Supt. R. V. Hunkins, issued a brief, making clear its reasons for insisting upon the acceptance of its plan.

The board of education holds in this brief that retirement insurance should be required in order that teachers may be more contented during their service because of a feeling of security of support in old age, which insurance will provide. The children will be safeguarded from the retention of teachers who have passed the age of professional efficiency, and those in charge of the schools will be safeguarded against the unhappy necessity of discharging instructors who have no adequate means of support in old age.

The Only Plan Possible

There is in South Dakota no pension system, and under existing circumstances the possibility of obtaining one is exceedingly remote. The board of education feels that even if a state system is established, it will not be entirely desirable because of the possibility of political interference and the necessity of passing a great deal of the cost on to local taxpayers.

A study by the school board of various state and local systems of retirement indicates that the minimum age for teachers is generally considered to be 60 years. This age has been accepted for the Lead schools. The various state and local retirement systems set up maximum annual increments during retirement, at amounts ranging from \$400 in Illinois to \$750 in North Dakota. The average for the United States is \$577. For the Lead schools, the board of education has fixed \$600 a year as adequate income during retirement.

The board holds that retirement insurance should be required only of teachers who are likely to continue in the Lead schools until the time of retirement. Teachers will suffer embarrassment unless they obtain insurance before the annual premiums are too high to be readily paid. These two problems have led the board to consider ten years of tenure in the Lead schools as the period after which teachers shall be required to carry insurance. The man or woman who has been in the Lead schools for more than ten years is quite likely to remain as a permanent citizen of the community because he has made use of the opportunities for advancement, and the probability of election to a similar position elsewhere or a probable change to another vocation are distinctly reduced. Common-sense study of the premiums and of the annual expenditures of teachers seem to indicate to the board of education that the age of 35 is the limit at which the retirement insurance requirement should go into effect even though ten years of tenure have not been attained. Older teachers would find the high premium rates prohibitive.

Wages Make Payments Possible

In putting the plan into effect, the board of education took into account also the fact that city and state pension systems are compulsory,

and has fixed the salary schedule in the Lead schools at an amount high enough to enable teachers to cover the cost of carrying the retirement insurance. This high wage is paid on the theory that the cost of protecting old age is properly a part of annual wages the same as the cost of board, clothing, and other necessities of life. The plan adopted makes the amount which the teacher pays into the fund his or her property, as it should be, and changes of location or vocation do not affect it. It was felt that in a small city like Lead, group insurance is not practicable because the number of teachers eligible is too small and the group changes too rapidly. The rules adopted by the board of education, as advised by Mr. R. V. Hunkins, superintendent of schools, are as follows:

Insurance Regulations

1. All teachers, except those now past 50 years of age, who have been, or shall have been employed in the Lead schools for a period of ten years or who have, or shall have reached the age of 35 years, shall be required to carry retirement insurance or the equivalent of such insurance before being eligible to continued reelection.

2. The amount of such insurance shall be sufficient to provide the insured with an income of not less than \$50 a month at not to exceed the age of 60 years. Credit shall be allowed for endowment in-

surance in old-line companies, or for government insurance that may have been taken out before the passing of these regulations or before the teacher came into the employment of the Lead schools. The amount of such credit shall be the monthly income at the age of 60 that the cash value of such insurance will purchase at any time before 60 that seems best to the insured to exchange such insurance for income annuities.

3. The required retirement-insurance contract or contracts, or any insurance for which credit shall be allowed, shall be with standard old-line insurance companies of unquestionable stability. Except for this restriction, the choice of insurance company shall be entirely a personal matter with the teacher concerned.

4. At the time any teacher reaches the tenure or the age limit at which retirement insurance becomes compulsory under these regulations, he or she shall exhibit insurance policies sufficient to meet the requirement, and the secretary of the board of education shall make a complete record of each of such policies including the name of the company, the title and number of the policy, and the amount of insurance provided for. Each year thereafter that the teacher remains in the employment of the Lead schools the teacher shall, before receiving a contract for the ensuing school year, produce receipts to show that the required insurance is still in force.

5. Nothing in these regulations, of course, shall prevent any teacher from taking out insurance earlier than the specified age or tenure and receiving credit at the time the requirement becomes effective. Neither shall anything in the regulations affect insurance of any kind or amount that the teacher wishes to carry in addition to the required insurance.

6. Nothing in the regulations is intended to mean that retirement at the age of 60 will be compulsory; reemployment after that time will, as at other times, depend upon a mutual agreement between the employer and the employed.

7. The regulations go into effect at the time of reemployment for the school year 1933-34.

A Program for Reducing School Taxes in Crawford County, Kansas

O. L. Heryford, County Superintendent, Girard, Kansas

An estimated saving of \$20,000 is to be effected in the operation of the Crawford county schools during the next school year, through a drastic economy program. The program was prepared through the united efforts of Supt. O. L. Heryford of the Crawford county schools, the tax representatives of various utilities, and school-board members of the various school districts. The savings will be effected by reductions in operating expenses, utilization of money on hand in bank balances in 35 districts, the discontinuance of seven schools, and the reorganization of three districts for greater efficiency and better financing.

The first step in the new program was taken with the calling of a conference of school boards in the office of the county superintendent. School budgets were studied and the entire amount of assets determined for the coming year. A revolving fund was established to take care of the running expenses during the period from September 5 to January 1, 1933, when the tax money becomes available.

As a result of the conference, savings of from \$100 to \$5,000 were effected through the utilization of funds on hand, money available in the county treasurer's office, and taxes receivable. In one case, where a school district had voted \$16,000 and only \$11,000 was needed, a saving of \$5,000 was made. In another district, where \$2,000 had been voted, the amount was eliminated, since the money in the bank was found sufficient to meet all costs. Another district which had voted \$3,000 where only \$700 was necessary, received a similar cut. In the 51 school districts represented in the conference, it was found that ten could be operated during the next year without a tax levy, although money had been voted at the annual meeting. In all of the work involving economies in operating expenses, it was the purpose of Superintendent Heryford and his coworkers to eliminate the practice of having large cash balances on hand, which do not draw interest but may be lost in bank failures, and to effect a reduction in school-tax levies.

In seven districts, the schools will be closed during the next year and the students transferred to other schools in the county. The action was recommended where the enrollment is small and the school patrons are willing to pay the transportation and tuition expenses of the pupils to another district. The plan seeks to eliminate the operation of very small schools, which often involve an enormous cost, and will be placed in operation without any appreciable effect on the present organization of the various school districts.

In Crawford county, it has been possible to work out two projects, which will be effective in reducing the school levy and in providing an improved school program for the future. One project involves the consolidation of two districts, to be known as Dist. No. 55, and to be operated as a more effective school unit, with an enrollment of 18 to 20 pupils on a 3.5-mill levy.

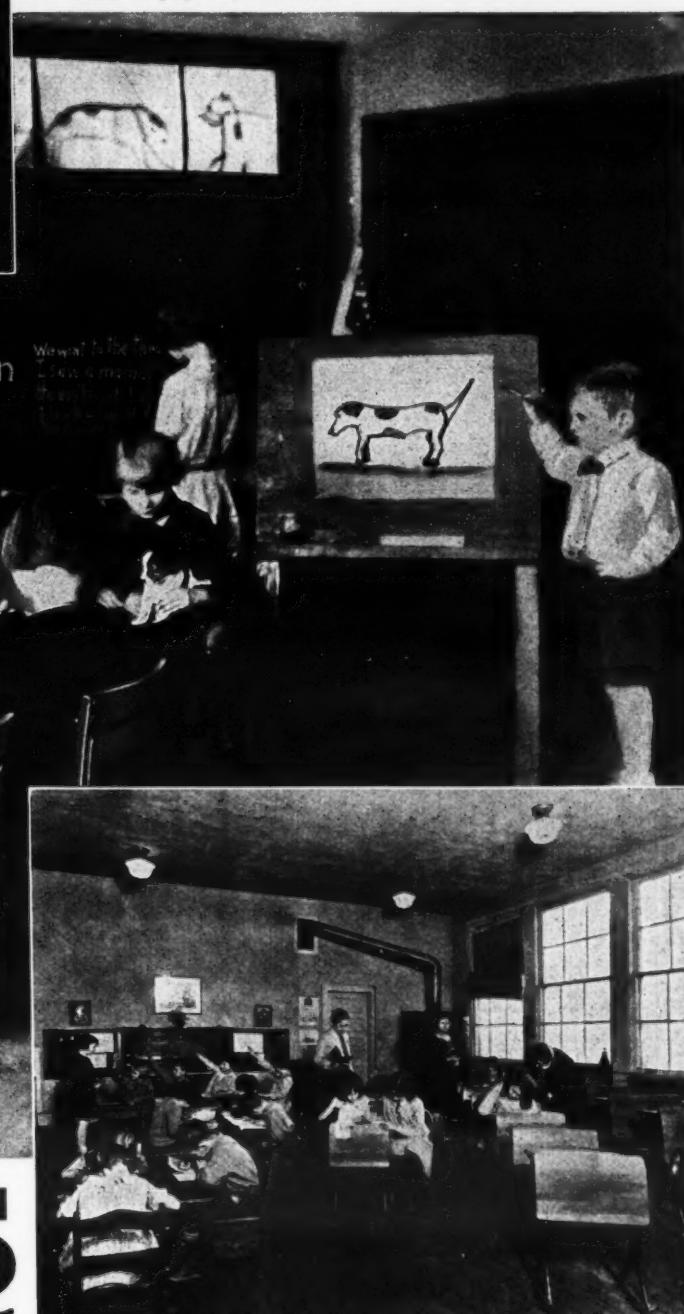
Another project is the discontinuance of Dist. No. 22 where the enrollment has dropped to six pupils. The territory of the discontinued district will be attached to adjoining school districts convenient for school purposes, which will increase the valuation of these adjoining districts and will permit them to reduce the school levy and to take care of additional pupils.

With the coming of the automobile, the improvement of the roads, and the shifting of population, the one-teacher schools are no longer crowded. In Crawford county last year, two schools operated with two pupils each and many others with less than twelve pupils. In one district, a single pupil composed the enrollment until another child was brought in from an adjoining district. The cost in one of these two-teacher schools was \$346.41 per child, and in the other \$384.91 per child. It is necessary to reorganize the one-teacher districts so that every teacher will have enough pupils to conduct an efficient and economical school. The state law in Kansas prohibits the organization of districts with a valuation of less than

(Concluded on Page 58)

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PARENTS and parent-teacher organizations the country over owe a vote of thanks to School Superintendents, Principals and School Boards. For the facts are that despite restricted budgets, standards of education are moving steadily forward. More and more children are being provided with better environment—with modern equipment that assures proper physical as well as mental development.

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No. 230

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THE PEABODY SEATING CO. —NORTH MANCHESTER, INDIANA—

(Concluded from Page 56)

\$100,000. Why should not this law be applied to existing districts?

The program in Crawford county has been limited for the time being to the merging of two or more small districts to form schools which are large enough to maintain one teacher with an adequate number of pupils of a two- or three-teacher school. The districts so formed are not so large that transportation is necessary. For the time being, conditions are unfavorable to the establishment of large consolidated districts in which transportation is necessary. The present program insures to all districts a lower levy and a better equipped and better taught school.

Teachers' Salaries

♦ Charles City, Iowa. The school board has adopted an economy program, providing for graduated reductions in teachers' salaries during the school year. The reduction, as established, is based on the salary schedule at which teachers were teaching last year, not on the salary at which they were reelected last spring. The reduction was also based on a plan, providing for a 10-per-cent cut on the first \$1,000, and 20 per cent on that part over \$1,000. The reduction for women teachers in the high school amounts to 13.7, making the salary of these teachers for this year \$1,380. The average reduction suffered by grade teachers is 11.7, which means an average grade salary of from \$1,000 to \$1,100. The board of education has effected a number of other economies, amounting to over two and one-half times the total reduction in salaries, so that the teachers have not been required to bear the greater portion of the burden of reduction. The economies ordered by the board had become necessary to meet a reduction in school revenue through delinquent taxes and shortage in tax money.

♦ Clinton, Ind. The school board has adopted a revised salary schedule for the school year 1932-33, which is arranged upon the basis of training and experience of teachers. The schedule carries a 10-per-cent cut in salaries for the year. Janitors in the various schools suffered a similar reduction in salary.

♦ South Bend, Ind. The school board has adopted a budget for 1933, calling for an appropriation of \$985,273 for teachers' salaries. This figure is \$228,727 less

than the amount appropriated for the past year. A substantial saving in the salaries item has been effected by the elimination of 40 teachers, or nearly 7 per cent of the teaching personnel, and a 12-per-cent reduction in salaries. Of the 40 teaching positions, 25 were eliminated by increasing the pupil load from 29 to 32.

♦ New Orleans, La. The school board has adopted a budget of \$3,889,680 for the 1933 school year, which is \$1,890,632 less than that spent for school purposes last year. The new budget carries salary reductions of from 14 to 26 per cent and was carried over the protests of the teachers.

♦ Framingham, Mass. All employees of the city schools, as well as town employees, have voluntarily contributed 10 per cent of their salaries and wages to the local welfare department for the period from July 1 to January 1 next.

♦ New York, N. Y. Appeals to Mayor Joseph V. McKee and Governor Roosevelt for definite statements of their positions regarding reduced salaries for teachers were recently voted by the new teachers' committee to protect salaries, at a meeting which nearly ended in a riot.

The disorder arose over a protest of 100 teachers against the one-month voluntary pay reduction proposed by former Mayor James J. Walker. Mr. Isidore Blumberg led in an attack against the joint salary committee of teachers' associations. Mr. F. Z. Lewis pointed out that Mayor McKee is powerless to act against salaries and he urged them to combine with other organizations working to prevent salary cuts.

♦ Duluth, Minn. The school board recently adopted a resolution, ordering a graduated salary reduction of 25 per cent for each member of the teaching staff. The reduction, it was estimated, would effect a saving of \$303,386. The reduction includes the teachers' salary loss through the shortening of the school term by two weeks.

♦ Portland, Ind. The school board has voted to make a reduction of 10 per cent in teachers' salaries for the new school year. The action was taken to meet a shortage in revenue due to a lowering of real estate valuations.

♦ Indianapolis, Ind. The school board has voted to apply the special legislative pay-cut act to the staff of the city schools. The pay cut sets up a graduated reduction schedule, providing for cuts ranging from 4 to 26 per cent, and effecting a saving of approximately \$80,000.

♦ Hillsboro, Ohio. The school board has ordered reductions in teachers' and janitors' salaries, ranging

from 5 to 15 per cent. Through this reduction, a saving of over \$4,000 was effected.

♦ Milwaukee, Wis. The school board recently adopted a substitute resolution of Director Edward Schroeder, in which it voted to impose a salary reduction upon teachers. The details of the reduction which were worked out by the finance committee, were made effective with the opening of the new school year. The reductions will be less than an average of 10 per cent and will save \$680,000, it is estimated.

♦ Fort Worth, Texas. Approximately \$190,000 has been cut from teachers' salaries this year, under an order of the board of education. The board adopted a scale of salary reductions, ranging from 10 to 20 per cent. Action was taken to meet a reduction of \$180,000 in the budget for 1932-33, attributed to a loss in state revenue and a reduction in taxes for maintenance.

♦ St. Joseph, Mo. The board of education has recently approved salary revisions which will result in a saving of \$141,878 a year for the school district. The new salary schedule calls for an expenditure of \$695,765 next year, as compared with \$837,638 for the year just closed. Most of the saving is in decreased salaries, although some of it results from a reduction in the number of employees. Supt. F. H. Barbee, who had a contract for next year at a salary of \$6,500, accepted a pay cut of \$70 a month, making his salary \$5,660.

♦ The school board of West Aurora, Ill., has voted to cut the pay of teachers a second 10 per cent and to shorten the school term by one month.

♦ Teachers of the Denver schools have voluntarily waived 10 per cent of their salaries for the budget year, beginning December 1. Increments provided in the salary schedule will be granted before the cut is made. Other employees have also accepted a 10 per cent cut.

Savings effected by these salary adjustments will amount to approximately \$450,000. Additional savings of from \$200,000 to \$250,000 must be made in order to come within the funds available for the new budget year. Decreased assessed valuation and shortage in miscellaneous funds compelled the school board to reduce the budget by \$650,000.

A. L. Threlkeld, superintendent of schools, said that savings above those effected by salary reductions will be made by an increase in the teaching load; a re-organization of the school staff; and carefully planned economies in capital outlay and purchase of supplies, equipment, and textbooks; and expenses of maintenance and operation of the school plant.

IF CLOUDY DAYS make dull pupils . . .



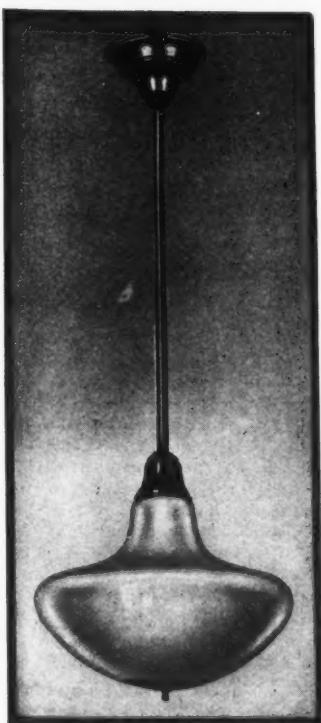
IF on cloudy days ordinarily bright pupils seem slow and dull—make this simple test for the Twilight Zone.*

Take a phone book and go into a classroom. Open the book at random. Can you read any name, address, and number rapidly and without effort? You should be able to do so readily—for the telephone book is scientifically designed for perfect legibility under proper light. If you can't—if you have to squint and draw the book closer to your face—the students are not getting enough light to do their best work.

*The deceptive half-light between obvious darkness and scientifically correct illumination.

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Teachers and Administration

♦ New Bedford, Mass. The school board recently issued notices to teachers, asking that married women teachers volunteer to take a year's leave of absence. Out of a group of 34 teachers, only 7 volunteered to take the leave, while 27 offered a variety of reasons why they could not comply with the request. Following the report, the board adopted a resolution, providing (1) that it is the sense of the committee that married women teachers who had not requested leave of absence be dismissed, (2) that the secretary prepare a form of notice, and (3) that the board notify the teachers when the matter of their dismissal will be acted upon. It was estimated that the board has applications from 35 teachers for whom there are no places on the teaching staff.

♦ State Supt. B. O. Skinner, of Ohio, in a recent opinion, has ruled that teachers employed for the 1932-33 school term will be entitled to salaries for either eight or nine months, regardless of the length of terms in state-aided school districts. Contracts for the year have been issued on a yearly basis and even though funds should not be available to operate more than six months, teachers will legally have due them the salaries for eight or nine months, according to their contracts.

With increasing requests for state-aid funds, Dr. Skinner has been careful to make clear that district funds must first be expended before state funds are payable, and that debts must be contracted by the districts before such funds can be claimed.

♦ Dr. Charles H. Elliott, State Commissioner of Education of New Jersey, has recently ruled that a teacher may not enter into an oral or written agreement with an education board to waive the benefits under the tenure-of-office act. The decision favored a number of teachers who were forced to resign and were re-employed by school boards to prevent their going under tenure. It was made on an appeal of Mrs. Helen W. Chalmers, who was refused re-employment by the Raritan township board of education for the next school year.

The board a year ago ruled it would not allow married women teachers to come under the protection of the tenure act, unless they were self-supporting. Mrs. Chalmers resigned toward the end of the third

year and was re-employed for the year 1931-32 under the condition that she waive her tenure rights. Dr. Elliott, in his decision, ruled that the appellant could not be held to such a contract, waiving her benefits under the teachers' tenure act.

♦ San Antonio, Tex. The school board has adopted a rule, eliminating all married women whose husbands earn \$2,000 or more per year. About 25 teachers are believed to be affected by the rule.

♦ Valparaiso, Ind. Thirty-one teachers of Valparaiso University will carry out their practice teaching in the local high school this year. The arrangement was made through the co-operation of the University and the local high-school faculty.

♦ Kenosha, Wis. The school board has adopted a drastic economy program which is intended to save the city approximately \$160,000. Contracts of 27 married women teachers were not renewed this year.

School Law

♦ Wives of school-board members may legally be given contracts by school boards of New Jersey, under a recent ruling of Dr. Charles H. Elliott, State Commissioner of Education.

In announcing the ruling, Dr. Elliott upheld the legality of contracts obtained by the wives of two members of the Pemberton township board of education. In two other instances, the commissioner declared the son of a member to be illegally holding a bus-driving contract and stopped a member from receiving \$100 a year as custodian of school monies.

Dr. Elliott stated that "while the practice of awarding contracts to the wives of board members is to be condemned, such awards are not illegal, since the husband under the law, is not pecuniarily interested in such contracts."

♦ Evansville, Ind. The school board's retirement rule has been set aside by the Appellate Court in the case of John M. Culver, who was removed as principal of the Campbell Street School because he had reached the age of 70. Mr. Culver brought suit in the Superior Court to recover his salary for September, 1931, and to force the board to return him to his teaching position. Evidence was introduced to show that Mr. Culver held a life license as teacher, had served for 30 years under contract, and had a success grade of 96 per cent. The higher court affirmed the decision of the lower court giving Mr. Culver his salary and ordering the school board to return him to his position. The court,

in giving its decision, said that "the mere fact that a teacher attains the age of 70 years does not indicate that such teacher's competency or efficiency has been impaired."

♦ The Illinois Supreme Court has recently held constitutional an amendment to Section 154 of the revenue act of Illinois. The decision affects all school districts in the state previously financed through the sale of tax-anticipation warrants and presents a serious problem throughout the state.

The state law provides that taxes shall be collected by the county treasurer in gold and silver coin, legal tender, or bank notes, and in no other currency unless otherwise provided for. Taxes for the educational purposes of any school district may also be collected in the orders or warrants payable out of the educational fund for the wages of teachers and other employees of the board of education.

Previous to the passage of the law, only tax-anticipation warrants could be accepted by the county treasurer in payment of taxes, and then only in amounts not exceeding 75 per cent of the levy, and the tax warrants so issued were a prior lien on the taxes collected. Teachers in Cook county and other parts of the state are holding warrants for salaries, all of which may now be used to pay taxes.

♦ Attorney General Bettman, of Ohio, has ruled that the members of the Perkins township school board are not personally liable for the transfer of money derived from the sale of centralization bonds. It appears that bonds were issued and sold for a new centralized school, but after the sale of the bonds, the district voted to decentralize and the school was never built. The money was placed in the hands of a sinking-fund commission and part of the cost of the bonds was paid by taking the proceeds of the municipal bonds when they became due, and getting a check from the county for the difference. This procedure had cost the county about \$1,000 a year. There remained about \$70,000 of school bonds unpaid, with \$61,000 of municipal bonds as collateral.

♦ Decatur, Ill. The school board recently rejected drastic economy measures which had been suggested to relieve the financial situation on the basis that these would work a hardship on taxpayers and would injure the efficiency of the schools. It was voted to operate the schools for the full eight months' term in order to retain the power of levying taxes for the school district. The board members voted against another salary cut for the teachers similar to the one ordered last spring.

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SCHOOL SUPPLY COSTS AND COOPERATIVE BUYING

To the Editor:

"When the river rose—the dam gave way. There was too much sand and not enough cement. The lowest bidder had built it."

Is the educational dam holding the potential of our present high standards of education going to break? Thinking people of America are asking that question each day. Lowest price does not necessarily mean economy.

A craze of publicized radical tax cutting propaganda in the name of economy to meet the present depression has swept the nation, and among certain groups the loudest shout for cuts in educational budgets are heralded as the messages of heroes. These Napoleons under the guise of public benefactors are attempting to strip the country of one of its greatest assets—properly educated youth.

Mathematically, two subtracted from four always leaves two, or one half of the original sum, despite the cry of politicians that two can be subtracted from four and still leave four. Plain facts told by figures indicate the futility of believing in infinity of material things.

With increasing enrollment in public schools brought on by the very depression itself, how can too radical tax slashes be made and the same effective high standard of work be maintained? No business institution in the face of an increased volume of business would deem it wise to decrease the man-power of its organization, to the cost of maintaining such man power, or to reduce the quantity or quality of the tools with which the work is to be done.

Everyone recognizes the economic emergency at hand, but the calm that marks the successful clearing of a school or theater in a fire is the answer to proper readjustment now rather than the hysterical mob method that some politicians would resort to in this psychological time.

The average wage of highway employees in Iowa is \$1,880 and the average wage of public school teachers is \$944 per year. Compare the relative training and its cost to each class concerned and the relative result and draw your own conclusion.

Despite this unbalanced condition Iowa teachers are readily falling in line for a justified slight salary reduction at this time in view of lower prices on all commodities in general and a lowering scale for all wage earners. In fact, the continuation of the same salary scale in any line of work this year constitutes a raise.

School supplies have reduced also equal to the tone of the era, but the high quality of the goods of the better companies remains the same, as do the efforts of the teachers who are accepting lower salaries.

Actually what are school supplies? Radical tax savers would have the public believe that every school expenditure aside from salaries is for supplies. School supplies really should be called school merchandise: pens, pencils, paper, school records, etc. They are tools of instruction. Supplies cannot include heat, light, power, insurance, repair, equipment, and so on. Supplies are materials used regularly and continuously and are chargeable to a definite period. They are in fact supplementary devices of the operation of all schools and must be a part of the program as much as the instruments of a doctor or a dentist, the tools of a mechanic, or the library of a lawyer.

Careful computation of figures in Iowa reveal that only four cents per pupil is expended annually for actual school supplies regardless of what political enemies of education would have anxiously receptive Americans believe. Much the same figures maintain in other states, I am safe in saying.

Then it can be stated that it would take 12½ years for the per capita charge against a pupil's school supplies to cost Mr. or Mrs. Average Iowan 50c or the price of an ordinary movie and 15 years to reach the price of three packages of cigarettes. Hard to realize it but we can't doubt facts. Who wouldn't be willing to give up a show every 12½ years or a package of cigarettes every five years?

One of the wedges of the radical tax elimination program is founded on the fallacy of an admitted failure in practice of what seems to be highly promising in theory—cooperative buying of school supplies. Some have ventured that a saving of 25 per cent could be accomplished by group buying.

But this sounds silly to the average business man who realizes how few items carry a margin of 25 per cent net profit.

Over the United States as a whole, authentic figures for 1931 show that the total net profit on school supplies was only .0276 per cent or approximately two and three fourths cents on the dollar. Can political machinery be set up to operate for twice this figure? Little explanation is needed here but simply cold business calculation of a plain business matter.

So frequently in planning coöperative buying the fanciful overshadows the practical in the mind of the philosopher. He forgets the clerical work, the packing, unpacking, repacking, checking, storing, adjusting, replacing, accounting, and in fact all of the mechanics of any mercantile organization involved, and each operation must be performed. Someone must do each part of the work and must be paid for it. If they are not specialists in the work, they are not worth whatever small sum they may be paid. If they are specialists, the small unit served as in the case of groups of schools or even counties they cannot afford the salaries and expense of other necessary help to carry on the work. If the unit is a whole state the political contingency most certain to enter is an unwarranted expense, and graft is almost sure to enter the picture on a large scale where the opportunity is so accessible. In small buying graft is impossible.

It is ridiculous to consider, as some suggest, that coöperative buying could be handled without an executive head any more than a school could operate without a head or a business without a manager. Even state athletic associations caring for only the athletic branches of the extracurricular program of a political unit find it necessary to have a paid executive head and office help.

Another point to consider in coöperative buying is a question as to how many school districts in a given unit ever so small would agree on the same size, weight, grade, and material of paper towels, school papers, hand soap, floor brushes, record systems, etc. The matter of individual choice of each district is normal and as it should be but at the outset impeded the practical operation of the theoretical plan of coöperative buying.

Moreover, would school districts wish to be dictated to in the matter of purchase by a cen-

tralized agency? Do school districts, locally supported institutions, wish to turn over all money for school supplies to a political hierarchy? Local control of schools which are supported by local tax money is the rightful privilege of American people and if they are looking into the future they will not allow themselves to be tied up by the optional plan of group purchase with an ultimate end of mandatory centralized plan of purchase of school supplies.

An outstanding example of the love for freedom and the right of local control can be cited in the case of the State of Iowa which has on its statute books a law providing for the mandatory purchase by political units of the state of supplies manufactured by the penal institutions of Iowa. An attempt was once made to enforce this faultily considered thrust against legitimate labor and local business interests but the state-wide revolt against the unwarranted dictation soon ended this unsuccessful effort.

On the surface of the matter I once thought well of the group purchase plan but I knew only the rosiness of the theory. Upon a complete investigation I revised my opinion renouncing the plan as only an atrocious communistic theoretic dream in direct opposition to the interests of the taxpayers intended to be relieved.

Americans are not blind nor are they fools. They may be swayed in a mob and lulled by the rimes of the silver-tongued politician with plenty of air and an object in view; but not for long. The American public will awaken and will not allow the so-called retrenchment to overlap into backsliding or marking time at best.

True, as spoken before, there is an emergency and curtailment wherever possible is advisable by all means and every saving possible where the effectiveness of education is not impaired is due America in this time of stress. However, sanity, calm consideration, and not the grasping at the straw of utopian dreamers will do more for ultimate sensible adjustment in this economic emergency. Snap judgments are usually worth less than the time it takes to make them and thoughtful constructive interest now will save the education of our great nation from being sacrificed on the altar of greed and for personal usefulness of mal-shapers of public opinion.

EMMET L. MORRIS

Marquette, Iowa, July 13, 1932.



A TEST OF SCHOOL LIGHTING AT TUSCUMBIA, ALABAMA

Children who enjoy uniform and adequate light are able to do better work than those in classrooms where the light falls below a standard amount. Evidence of this fact has been gathered by Supt. R. E. Thompson, of Tuscumbia, Alabama.

In a modern school building, two sixth-grade classes were selected for an experiment to prove the theory that poor lighting is the cause of loss of vision and interferes with schoolwork. In one of the two rooms the lighting equipment was replaced with four 300-watt indirect fixtures, controlled by a photoelectric relay, or "electric eye." The installation was designed to maintain an intensity of 12 feet-candles of light on the working surface and the electric eye was adjusted to automatically turn on the electric light whenever the sunlight became insufficient. The other room was fitted with only two 150-watt direct-lighting fixtures.

Each of these two classrooms was occupied by a sixth-grade class. The children were submitted to the standard achievement test and the Otis intelligence test and the groups were balanced. At the end of the first school year in 1930-31, it was found that

the electric eye had operated the lights in one classroom 34.1 per cent of the school hours. At the end of the second year of the test, the lights had operated 32.6 per cent of the school hours.

At the end of the first year, 4 failures out of 36 pupils developed in the well-lighted room, as against 11 failures out of 34 pupils in the more poorly lighted room. The percentage of failures in the poorly lighted room was 20 per cent higher. The test was continued for a second year under identical circumstances. Out of 42 pupils in each classroom there were 8 less pupil failures in the well-lighted room than in the poorly lighted room. The children in the well-lighted room were more alert, cheerful, and attentive on dark days, while those in the poorly lighted room seemed restless and sleepy and were harder to teach.

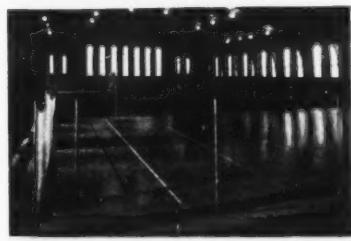
Mr. F. C. Albert, lighting engineer of the Alabama Power Company, who observed the test, said that the cost of electricity in the well-lighted room was \$22.35 for the school year. The annual cost of educating each pupil for the year 1931-32 was \$28.



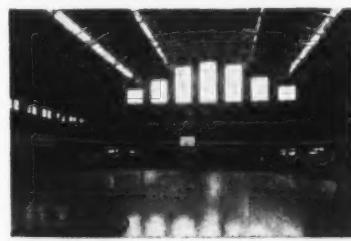
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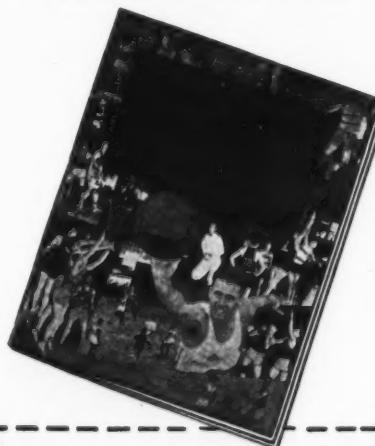
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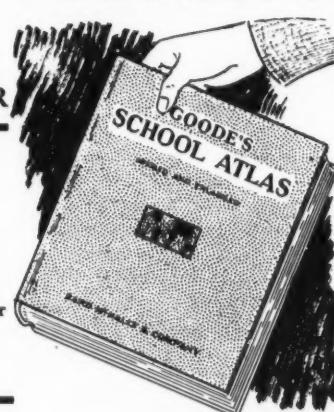
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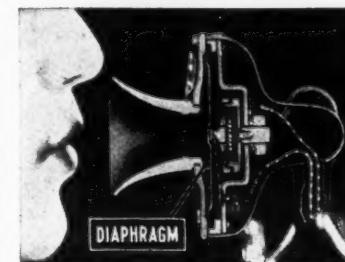
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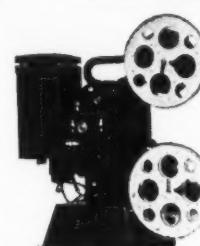
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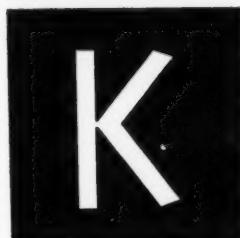
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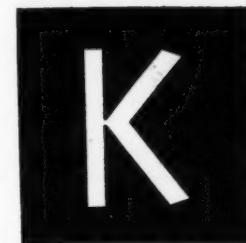
Again KIMBALL is accorded the recognition that springs directly from a reputation for superior service. That the Lincoln Grant School is satisfied with its KIMBALL equipment is a foregone conclusion. All KIMBALL users are satisfied. KIMBALL equipment is built that way.

Little wonder, then, that when KIMBALL Laboratory and Vocational Furniture made its appearance its acceptance was instantaneous and widespread. Schoolmen were quick to realize the value of a product backed by years of experience and experiment.

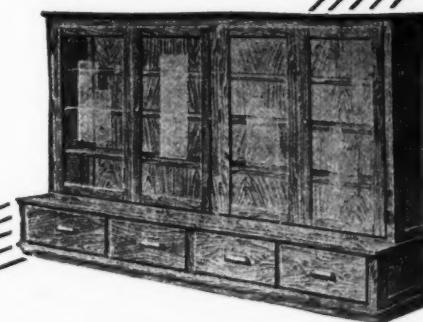
Design, construction and workmanship of a highly developed degree bring advanced standards to KIMBALL furniture. The high quality and unparalleled features of KIMBALL products assure lasting satisfaction.

Our large, cloth bound catalog, "Laboratory and Vocational Furniture", profusely illustrated and containing a large number of suggested layouts, will be of special interest to you.

Sent free on request.



No. 990—
Apparatus Case



W. W. KIMBALL COMPANY, CHICAGO, ILLINOIS

Established 1857

Laboratory and Vocational Furniture Division
306 South Wabash Avenue
A. E. Kaltenbrun, Director
of Sales.

Eastern Sales Offices
489-5th Ave.
New York City.

KIMBALL BUILT LABORATORY AND VOCATIONAL FURNITURE CHICAGO

Book News

The Story of Our Republic

By Irving P. Foote. Cloth, 448 pages. Price, \$1.24. The World Book Company, Yonkers, N. Y.

This introductory history of the United States has been written for beginners at the fifth- and sixth-grade level. The story is presented in complete harmony with the newest objectives and the most progressive teaching practice in the social studies. The author writes vividly and in simple language, and recounts the important and dramatic events in the history of our country in a way that cannot fail to hold the interest of children.

The text is divided into nine important sections, or units, each unit divided into chapters, and each introduced by means of a brief, inspiring statement that broadly outlines the subjects to be discussed and that may be used to motivate the entire unit of work. At the close of each chapter there is a test of the multiple-choice type, a series of questions and problems, and suggestions for further review.

The author is a southern educator, who sees our history through the eyes of the new South. He is entirely fair and judicious in his estimate of the slavery problem, of the events of the Civil War, and of the difficult years of the reconstruction. He merely approaches the entire tragic matter from a position beyond the Confederate lines, looking northward to the scene of action. The deeper-lying causes, and the fundamental principles of government, politics, etc., are touched upon very lightly and in harmony with the ability of children for whom the book is intended.

The book is very completely illustrated and contains many original drawings and maps in color. These are used not merely to attract interest and to picture significant events, but also to drive home the facts concerning dates, important personalities, and leading problems. Mechanically, the book is a remarkable production for the low price which has been set by the publishers.

Learning to Spell

By W. H. Coleman, H. L. Donovan, G. W. Frasier, and A. J. Stoddard. Paper, 62 pages. Hall & McCreary, Chicago, Ill.

A graded course in learning to spell, consisting of separate volumes for each grade, two to eight, inclusive. The material has been prepared as a result of a careful

study of vocabulary and placement, as well as the procedure for teaching and the method for studying. Special features of the book taken up in detail are the vocabulary, spelling objectives, word groupings, provision for short-term schools, word lists for daily use, and hard words to be learned from the year's work. Each lesson contains tests for review and each unit of work covers a six-weeks' period—five weeks of regular lessons and one week of review lessons.

The special two-book edition of *Learning to Spell* consists of two standard cloth-bound volumes: an elementary book for grades two to six, and an advanced book for grades seven and eight. The elementary book contains 213 pages of material in the form of daily units of work and review for pupils of the lower grades. The advanced book contains 96 pages of similar material adapted to the needs of pupils in the higher grades.

The material is carefully selected, well arranged, and suited to use by the teacher in the elementary grades of the public schools.

The Pathbreakers from River to Ocean

By Grace R. Hebard. Cloth, 312 pages, illustrated. Price, \$2.50. The Arthur H. Clark Co., Glendale, Calif.

This is the sixth revised edition of the first book to give adequate attention to the history of the vast empire west of the Mississippi. It seeks to recount the heroic deeds, the daring adventures, and the hazardous enterprises of the discoverers and pioneers of the Far West. Some of the interesting chapters are the great pioneer trails, the fur-trading stations, the famous western explorations and discoveries, and the coming of the railroads. The book is illustrated with fine halftone illustrations. A vocabulary and a bibliography are included.

The World We Live In

By Louis Weinberg, Enos E. Scott, and Evelyn T. Holston. Cloth, 266 pages, illustrated. Price, 92 cents. D. C. Heath & Co., Boston, Mass.

This book has been prepared by experienced authors in response to a demand for an introduction to social geography that would serve pupils and teachers of the fourth and fifth grades. The material is sufficiently broad in scope and treatment to serve as an introduction to the social studies.

The book contains thirty chapters, each of which deals with new and attractive material especially suited to child experience. Teachers will be interested in the development of constructive imagination, in the creative aspects of teaching, and in the variety of useful illustrations which enliven the subject matter.

The material treats in detail such interesting topics as foods, clothing, housing, transportation, useful tools, and the world as a workshop.

Standard Service Arithmetic Work-Books

For grades six, seven, and eight. By G. M. Ruch, F. B. Knight, and J. W. Studebaker. Price, 36 cents each. Published by Scott, Foresman & Company, New York, Chicago.

These books offer a series of standardized drill exercises on the essentials of arithmetic in the three upper grades, together with controlled distribution of practice. The drills form an adequate maintenance program and a defense against forgetting. A progress chart is used for making the pupil aware of his success, and as a means of testing for sustained motivation. Variations in difficulty from drill to drill are equalized by the norms (ratings), and the ups and downs in the chart indicate the changes in ability.

The books have been prepared by a group of authors experienced in this work and offer a sufficient amount of problem material and practical drill to help the pupil in keeping a check on his own progress, in discovering his own weaknesses, and in showing what must be done to correct weak spots. The remedial work is easy to use and is helpful in training pupils to assume responsibility for their own progress. Each of the thirty practice drills presents to the child an arithmetic picture of himself and offers an accurate summary of the work in arithmetic as a standardized test.

The Story of Steel

By V. S. Spencer. Cloth, 127 pages. Published by Laidlaw Bros., Chicago, New York.

The book recounts the story of a visit to a steel mill. It reveals some of the romance of the industry and shows the practical workings of the different departments devoted to the processes used in the manufacture of steel. The book opens with a recital of the method of making railroad rails, and ends up with the manufacture of cast-iron pipe, steel pipe, and seamless tubing.

Instructional Tests in General Science for Junior and Senior High Schools

By Earl R. Glenn and Benjamin C. Gruenberg. Paper, 96 pages. Price, 36 cents. World Book Company, Yonkers-on-Hudson, N. Y.

The 35 tests in this book are intended to provide teachers in junior and senior high schools with a ready means for diagnosing the learning difficulties of students and for determining student achievements. It is expected that the tests will be used in such a way that thorough teaching is readily possible and that evident weaknesses of students will be made up by supplementary reading and additional laboratory work. The tests are accompanied by a teacher's manual and a key for rapid scoring.

A Holden Book Cover Receives



ALL THE WEAR
of the school year!

It strengthens the bindings!

It reinforces the entire book!

It doubles the lives of the
books and saves the
taxpayers money!

Samples Free

The Holden Patent Book Cover Co.
Miles C. Holden, President
Springfield, Mass.

Elementary English Work Books

By P. H. Deffendall. Paper, 64 pages each. Price, 28 cents. The Macmillan Company, New York City.

These books provide carefully graded exercises for word and sentence study in the fifth and sixth grades. The books are intended to accompany any ordinary basic text.

Business Opportunities for Women

By Catharine Oglesby. Cloth, 308 pages. Harper and Brothers, New York, N. Y.

The associate editor of a great women's journal describes, in part one, the technique of finding, getting, and holding a job; in part two, she discusses the leading occupations open to women of ambition, training, and ability. The pictures drawn are rosy and alluring, but the vocational counselor would appreciate more specific information on the basic personal aptitudes, the formal education and the disadvantages of the respective jobs.

Compton's Pictured Encyclopedia

By Guy Stanton Ford, editor-in-chief. Prepared with the assistance of 176 associate editors. Fifteen volumes. Published by F. E. Compton & Company, Chicago, Ill.

This well-written and excellently illustrated encyclopedia should go far toward reaching the ends which its editors had in view, in the school, the home, and the library. A widening of educational interests has resulted in a growing need for supplementary material which makes an encyclopedia a necessity for school children.

This set is remarkable for its simplicity, its interest, and its youthful enthusiasm. All care has been taken to make it as useful and as attractive as possible to children, without making it at all childish or undignified. The language is simple but there has been no "writing down" to the reader. Besides, the information is given fully and presented carefully. For these reasons grown-ups will find it fully as usable as will the children.

Besides the instructional value of the many pictures, maps, and charts, the work has further pedagogical helps. There is a list of interest questions in each volume, together with a complete index of facts, in which each entry is marked for pronunciation and briefly explained. The clever approach to many difficult problems will also commend itself to teachers.

There are points in the work which all will not commend. There seems at times to be evident some slight political bias, and even, though to a lesser degree, religious bias. These, of course, are but natural outcroppings of live enthusiasm, and are commendably absent from the work as a whole.

It is difficult to imagine an encyclopedia that would appeal more to children, and even to adults for ordinary use, or one which might prove more useful for school purposes.

The list of editors includes such well-known educators as Prof. William C. Bagley, Teachers College, Columbia University; Prof. L. D. Coffman, University of Minnesota; Prof. Frank N. Freeman, University of Chicago; Prof. Arthur B. Mays, University of Illinois; Prof. Fletcher Harper Swift, University of California; and Walter J. Greenleaf, United States Office of Education.

Household Physics

By Walter G. Whitman. Cloth, 510 pages. Price, \$2.75. Published by John Wiley & Sons, New York, N. Y.

This is a revised edition of a work first issued in 1924. It has been brought up-to-date by the addition of the newest findings in the field of theoretical physics, and by the explanation of the newest devices which embody physics—television, radio, oil heaters, etc. The book is thoroughly scientific in its point of view, and is a fine example of thorough motivation of the study of science principles.

Song Plays for Little Children

By Mae B. Higgins. Cloth, 44 pages. The John Day Company, New York City.

Twenty songs for use with song games and folk dances are included in this collection of original material. The songs are suitable for use in kindergartens, children's play festivals, and school entertainments.

The Dixon Class Card

By John Dixon. Price, 40 cents. Published by The Bruce Publishing Company, Milwaukee, Wis.

This is a complete, modern, class-record form, designed to meet the demands of teachers in both elementary and secondary schools. The form is sufficiently flexible for use with letter grades or per-cent markings, and will serve equally well for various periods of time, ranging from six weeks, or nine weeks, to a semester.

The card has space for a complete class roll and is so sectioned and indexed that any name can be easily and quickly located. The use of modern testing materials is carefully provided for. The most important feature, however, is the plan for reducing the time of averaging class tests and recitations to a minimum.

Buildings and Equipment for Home Economics in Elementary Schools

By Melvin Brodshaug. Cloth, 188 pages. Price, \$1.75. Published by Teachers College, Columbia University, New York.

No. 49. Rests flush with desk top. (No. 48 has flange.) Sizes to fit present holes in your desks.



Send for a FREE SAMPLE of the school inkwell that actually cuts replacement costs

Most of our best customers for the Sengbusch practically indestructible hard-rubber well were once skeptics.

"We've got to set aside so much a year to replace broken and corroded wells, and that's that," they said.

It took a trial to convince them that much of this expense is needless—and a sample will open your eyes, too, we believe. The Sengbusch is *real* ALL HARD VULCANIZED RUBBER. It is made in one piece.

It has no glass bottle to break. It doesn't soften and crumble with the passing months. Your ink simply *doesn't* affect it.

We know you're anxious to pare maintenance expenses. A letter will bring a sample. Why not "do it now," while the school year is still young?

Sengbusch

SELF-CLOSING INKSTAND CO.
1018 Sengbusch Bldg. Milwaukee, Wis.

This study divides quite naturally into three parts. The author presents first, a summary of the activities, objectives, and teaching methods in secondary schools. He evaluates the activities and the objectives in the light of the opinions of some fifteen prominent supervisors and college professors of the subject.

His second point of attack is an objective study of the departments as they exist in 39 selected high schools, all of which are recent so far as plant and equipment are concerned, and which further are considered to be well planned, adequate for instructional purposes, and fully equipped.

On the basis of the two previous sections, the author sets up in the third part of the book, criteria for evaluating home-economics plant and equipment and outlines what he considers necessary minimum standards which logically follow from these procedures. He suggests in detail the size and number of use of rooms, the size and arrangement of the same, and the larger equipment commonly called furniture or installation.

The study naturally develops criteria and standards of the inclusive and rather costly types. There is no consideration of the actual amount of time of service actually given by such rooms as the laundry and the model housekeeping suite. The fact that these two expensive elements of a home-economics department are frequently wasted, or are at least extravagant so far as actual service is concerned, does not enter into the consideration of the present study.

Superintendents of schools, building committees, and architects will find the study of considerable value in clearing up many problems and difficulties that are rather dimly understood at the present time.

The Corporation Income Tax and Its Relation to School Revenue Systems. Study No. 11, August, 1932, Research Division, N.E.A., Washington, D. C. This study limits itself to the procedures and practices of twenty states which levy a tax on the net income of corporations. The returns which the schools receive in twelve of the states are made clear. The study contains fundamental important material with which every state, county, and city school officer should be familiar. The study should be supplemented with another on personal income tax plans with which corporation income tax is intimately bound up in a considerable number of states.

Statistical Code for Assembling School Costs. A report of the Committee of the National Association of Public-School Business Officials. The report takes up school designation, kind of activity, classification of expenditures, and offers a detailed statistical code and typical accounting forms for the use of schools.

● *child*
**NOT A SINGLE ~~PASSENGER~~ WAS
 CUT BY BROKEN, FLYING GLASS**

AUTOMOBILE INSURANCE
 LIABILITY—PROPERTY DAMAGE

**AMERICAN
 FIDELITY AND CASUALTY CO.**
 INCORPORATED

RICHMOND, VIRGINIA

M. S. ALDRICH, AGENT
 414 CHARLESTON NAT'L Bk. BLDG.
 CHARLESTON, W. VA.

August 8th, 1932

Mr. George S. Engle, Assistant Gen. Mgr.,
 Atlantic Greyhound Lines, Inc., of W. Va.,
 Charleston, West Virginia.

Dear Mr. Engle:

In checking over the accident record of the Atlantic Greyhound Lines, Inc., of West Virginia, I am very happy to note that there has been a decrease of 8% in the loss ratio during the last nine months. This would indicate pretty nearly 1/2 a month, and there is no question to my mind but that the improvement in your inspection and maintenance methods have been the prime contributing factor.

Collisions where other vehicles have either skidded or crashed into the front or side of the buses have been materially reduced, and the claims of passengers arising out of this class of accident have been reduced to a negligible figure.

I attribute considerable of this savings to your use of Libbey-Owens-Ford Safety Glass for the reason that while windows in the bus have been cracked or broken in almost everyone of these accidents, there has not been a single claim where passengers have been cut by flying glass.

All of which conclusively demonstrates the proposition that most accidents are avoidable. I compliment you on the showing that your men have made and solicit your continued support and cooperation to the end that there may be further and more substantial reductions in the loss ratio.

With kind regards, I am

Yours very truly,

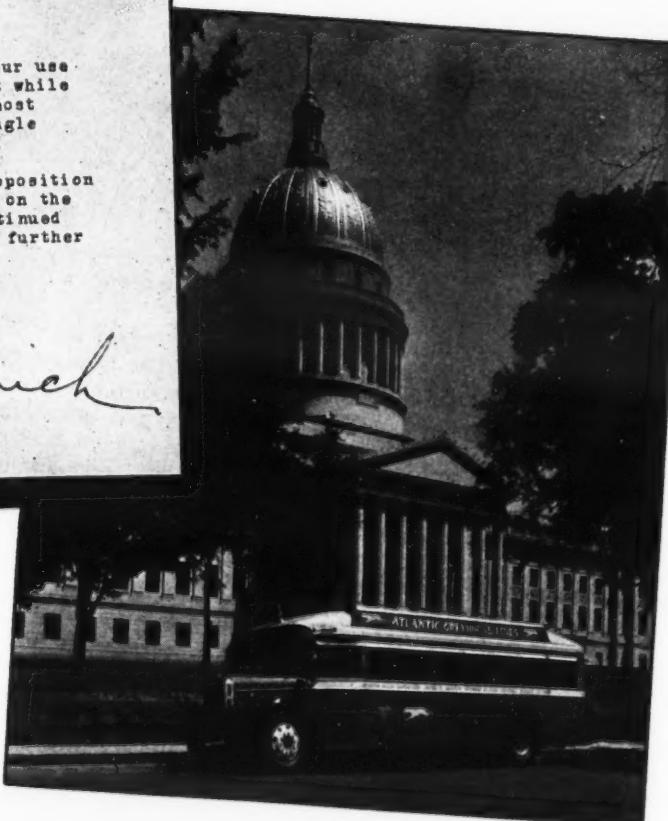
M. S. Aldrich
 State Agent

MSA:SH

FORM 7, 1932-4-22

"We Serve; Therefore We Grow"

● The above statement, reading "passenger", is based on the letter herewith reproduced. How much more important it is that that same statement be made concerning children! L-O-F Safety Glass is an essential specification in all school buses. Insist on it in your new equipment; demand it in all replacements.

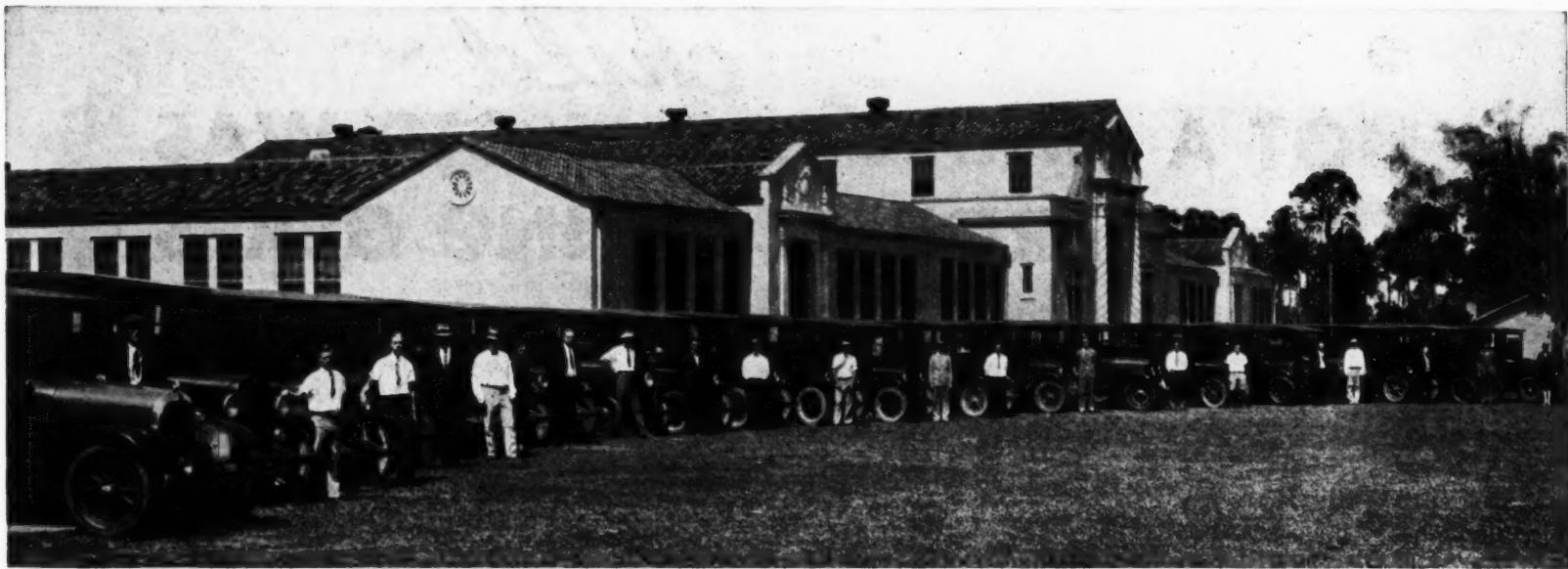


A bus of the Atlantic Greyhound Lines, equipped with L-O-F Safety Glass, before the new Center Unit of the State Capital, Charleston, W. Va., which is glazed with L-O-F Quality Glass. Architect: Cass Gilbert, New York. The sparkling beauty, lasting brilliance and uniform quality of this fine glass for windows recommend its use in public buildings of all descriptions, especially schools, where maximum light is essential and the economy of longer life a factor to be considered.

**LIBBEY: OWENS · FORD
 SAFETY GLASS**

LIBBEY-OWENS-FORD GLASS COMPANY, TOLEDO, OHIO, manufacturers of Highest Quality Flat Drawn Window Glass, Polished Plate Glass and Safety Glass; also distributors of Figured and Wire Glass manufactured by the Blue Ridge Glass Corporation of Kingsport, Tenn.





THE LAKE COUNTY SCHOOL BUSSES DRAWN UP FOR THE ANNUAL INSPECTION AND BUS-DRIVERS' CONFERENCE

An Economical County Transportation System

D. H. Moore, County Superintendent of Instruction, Tarvares, Florida

To appreciate the system of school transportation in Lake county, Florida, it is necessary to know something first about the county's consolidated schools.

The Lake county school system has been organized on the six-six plan. It contemplates an elementary school in every community where there are sufficient pupils to justify it and the demand is great enough for a local school. These consolidated schools all have six grades and offer instruction required by the state course of study.

All children above the sixth grade are transported to high schools, of which there are seven in the county. These all offer six-year courses and are recognized by the state department of education and the Association of Colleges and Secondary Schools of the Southern States. While some of the schools are designated as junior-senior high schools, they are all organized as units and are housed in one building each.

The county has an exceptionally fine network of hard roads, and 27 busses are operated to transport nearly 1,000 children daily to the centralized elementary and high schools. The average load of the busses is 30 pupils, transported over an average distance of ten miles. The longest distance any child is carried is sixteen miles.

In view of the fact that the roads are generally good and the loads not excessive, and that the distances are comparatively short over the county, the board of public instruction has specified the use of light trucks fitted with steel school-bus bodies.

It has been considered wise for the county board of education to hire the equipment and to pay the owners a stipulated sum per month, for the use of busses and wages of the drivers. The contracts for transportation in each case are for the period of one year and require the contractor to provide the necessary busses, fuel, and drivers, and to operate the equipment in a manner satisfactory to the board. An operating schedule is provided, and the competency of the drivers and the safe maintenance of the equipment are provided for. The busses may not be occupied by any but school children on school trips, except with the special permission of the board. The driver is responsible for the conduct of the children while in his care and is given authority or control as if he were a teacher. Cases of discipline must be referred to the principal of the school. A careful record is re-

NOTICE

This Bus Must Stop at All Railroad Crossings.

No misbehavior will be tolerated in this Bus. The Driver is requested to report all Misconduct to Principal of School.

The Bus is required to meet all Children promptly at designated points to and from School.

Extreme care should be used in taking Children on this Bus and letting them out. Reckless or fast driving of this Bus is Strictly Forbidden.

A Violation of any of these Regulations will be deemed sufficient cause for the Cancellation of Contract covering this Transportation.

A suitable Reward is offered for positive proof of the violation of any of the above Regulations.

BOARD OF PUBLIC INSTRUCTION
LAKE COUNTY, FLORIDA

A WARNING NOTICE POSTED IN ALL SCHOOL BUSSES

quired of all children carried.

The greatest possible care has been insisted upon in the driving of the busses and the loading and unloading of children, and the regulations have been so carefully enforced that no single serious injury to a child has occurred.

The following special regulations are issued to bus drivers:

To All Bus Drivers:

We have received such splendid cooperation from you in the past that I find it hardly necessary to write this letter. However, I wish to remind you of regulations mentioned in your contract and the following rules of the County School Board in regard to the operation of school busses in Lake County, our purpose being to get the children to and from school promptly and with the least possible chance for an accident.

BEST USE OF SCHOOL TIME

There is nothing uncertain about the need of economy in school administration. A solemn obligation rests upon each teacher who is fortunate in being employed this year in a school system to do everything in his power to see that the schoolroom hours are so profitably spent that no child will be short changed educationally and no gains which have taken all the years to achieve will be lost.

It is our duty to make the best possible use of the resources at hand and to maintain instruction at a high level of efficiency. When that result obtains, the most important characteristic of an economical school system has been created.—Agnes Samuelson.

1. Busses should stop at the approach of every railroad crossing and be sure a train is not approaching before crossing.

2. Children should be let in and out of busses only at the door on right provided for that purpose and at sidewalk to right of road or street.

3. Bus drivers should adopt a trip schedule and inform parents so that children may meet bus promptly on routes at the points designated by driver.

4. Busses to take children to and from (as near as possible) their homes on rainy days or stormy weather.

5. Bus drivers should not allow any disorder whatever on busses, nor allow persons to ride on busses who are not school pupils, except by permission of the School Board.

6. Bus drivers are cautioned to keep busses under control at all times, and any driver reported for fast or reckless driving, will be immediately dealt with upon proof of violation of this rule or any other rule made for the safety of the child.

7. Bus drivers should observe all traffic regulations in passing through incorporated limits.

8. Busses should be kept in good mechanical condition at all times. This refers particularly to steering apparatus, breaks, and tires.

9. It is the duty of drivers to report to authorities the violation of state laws in regard to motor vehicles passing school busses while loading or unloading children.

10. Principals of schools are expected to take proper care of children on arrival at school grounds and while in waiting for the arrival of busses.

11. Bus drivers should keep a list of pupils taken on bus and see that all are delivered to their respective stopping points in the afternoon.

12. All drivers of busses are respectfully requested to use utmost care to see that the children under their care are transported to and from schools with the greatest possible comfort and safety.

D. H. MOORE,
County Superintendent

The board of public instruction requires that bus drivers observe all state laws and local ordinances. They are especially required to see that motor vehicles do not pass school busses while the latter are loading or unloading children.

The board of public instruction requires that all busses shall be brought periodically to the county seat for a complete mechanical inspection. At this inspection a conference is held with the drivers concerning their problems. Suggestions are made concerning safe driving methods and methods of handling the children.

The Chassis is the Backbone of any SCHOOL BUS

COMPARE

**THE SAFE MACK SCHOOL BUS CHASSIS
WITH ANY OTHER ON THE MARKET**



*"The Mack Model BG Chassis
for 30-35 Passenger Bodies"*

SAFETY, that vital factor so essential for school bus operation, must first be built into the chassis. For the chassis is the backbone of the school bus. Only the strongest and finest chassis construction assures protection in the event of a mishap. School authorities are giving more careful attention than ever before to the purchase of buses. The realization that children's lives are not merchandise—with a dollars and cents valuation that can be covered by insurance—is driving home the need for an extra margin of safety in school buses. Every Mack School Bus chassis, from the smallest capacity to the largest,

has an extra margin of reserve strength both in materials and in design. While the above photograph depicts a general ruggedness of chassis, it does not reveal the in-built strength, safety and long-life features of the Mack School Bus, so apparent in a side-by-side comparison with any other make. In actual service, the record of Mack performance and safety has definitely proved the practical soundness of the statement that "The Chassis Is The Backbone Of Any School Bus." We should like an opportunity to give you the complete story. Write to the office below for additional information, or a demonstration.



MACK TRUCKS, INC., 25 BROADWAY, NEW YORK, N. Y.

New! "Hallowell" School Chairs of Steel



FIG. 1312—"HALLOWELL" School Chair of Steel



FIG. 1313—"HALLOWELL" School Chair of Steel With Tablet Arm

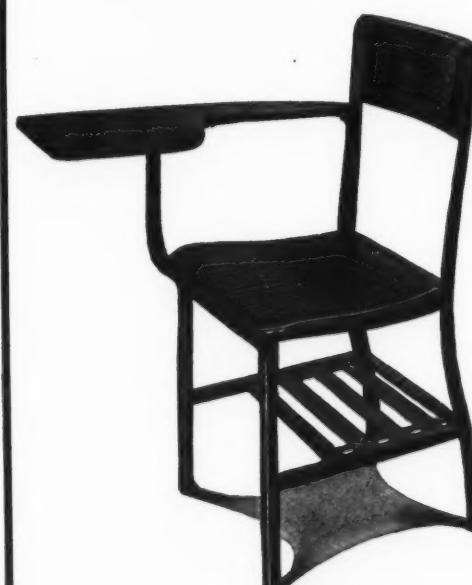


FIG. 1314—"HALLOWELL" School Chair of Steel With Tablet Arm And Book Rack

WRITE US.

"HALLOWELL" SCHOOL CHAIRS OF STEEL

The frame is made from flat, strip steel formed up in our own dies and welded throughout to make a strong one-piece unit.

The legs are shaped to facilitate sliding and Tablet Arm support is curved to provide extra knee room.

Seat, Back and Tablet Arm — each of high grade plywood — have the right size, shape, thickness and strength.

WRITE US

"HALLOWELL" SCHOOL CHAIRS OF STEEL

The frame is made from flat, strip steel formed in our own dies and welded throughout to make a strong one-piece unit.

The legs are shaped to facilitate sliding and Tablet Arm support is curved to provide extra knee room.

Seat, Back and Tablet Arm — each of high grade plywood — have the right size, shape, thickness and strength. Notice the Book Rack below.

WRITE US

STANDARD PRESSED STEEL CO.

BRANCHES
BOSTON
CHICAGO
DETROIT

JENKINTOWN, PENNA.
Box 553

BRANCHES
NEW YORK
SAN FRANCISCO
ST. LOUIS

Another School Bus Season Has Proven That YORK-HOOVER SCHOOL BUSSES Are Leaders in the Field



THE COMPOSITE WOOD AND STEEL BODY IS THE MOST DURABLE

Buy Through Your Auto Dealer or Write

YORK-HOOVER BODY CORP.
York, Pa.

MANUAL TRAINING BENCH No. 280



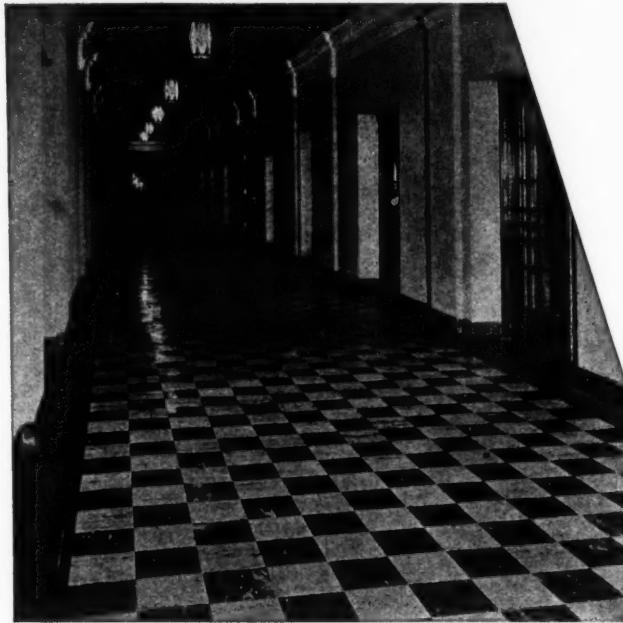
A GLANCE AT THIS NEW PATTERN will show that the combination of various-sized drawers and cupboard makes an unusually practical bench. Notice, especially, the small drawer which is intended to hold nails, screws, small tools, etc., which so easily become misplaced when kept with the larger tools. Being able to immediately lay hands on these small but necessary items, will be the means of saving a great deal of time, thereby promoting efficiency. Also, notice the large cupboard, which will hold such tools and materials which cannot be kept in the general or three private drawers. Bench is equipped with our Abernathy Rapid Acting Roller Nut Vise No. 70D on front, adjustable stop and dog.

THE CHRISTIANSEN CO.

Manufacturer of this line since 1898

2814-2842 West 26th St.,

Chicago, Ill.



PROPERLY MAINTAINED WITH SHINE- ALL AND HIL-BRITE!

SUPER SHINE - ALL is the only neutral liquid chemical cleaner recommended by Flooring Manufacturers of all types of floors.

It is a significant fact that there are thousands of school buildings in the United States being satisfactorily cared for with Hillyard's complete line of registered, trade marked materials.

Manufacturing Chemists for over 25 Years!

HILLYARD CHEMICAL COMPANY
ST. JOSEPH, MISSOURI, U. S. A.

HIL-BRITE is the self polishing liquid wax which dries with a lustre in 15 minutes. It requires no rubbing or buffing.

LISTEN TO THE HILLYARD MESSAGE BEFORE IT'S



**SAVE
Floors &
Money.
Hillyard
Maintenance
Men without
obligation will
show you. Write
for conference.**

**Request
your free
copy of
"Modern
Maintenance."**

SCHOOL-BOARD FUNCTIONS AND OPPORTUNITIES

(Continued from Page 18)

not the function of the board to enter actively into the administration of the school system. It employs an expert, the superintendent, to do that work. In addition to the qualifications already set forth, we may mention that experience in business or other organizations is often a very valuable asset to a board member. In this connection we may also answer the question as to whether or not women make efficient board members. If a woman has had sufficient experience in business or other fields of activity to develop sound judgment and qualities of leadership, there seems to be no reason to suppose that she would not make an excellent board member. In fact, studies made of the compositions of school boards of the larger cities reveal that about 15 per cent of the board members are women.

The Duties of the Board of Education

The duties of the board of education in the scheme of city school control are very briefly outlined by the authors as follows:

In the broadest sense what is the place of the board in the administration of the school system? The board is provided for by law and chosen by the people of the district for the purpose of assuming their responsibility for providing all the children of the district with adequate educational facilities. Since board members as a rule have not had the necessary professional training, and since they are too busy with their daily tasks to look after the details of administration of the school system, it is not to be expected that their work should go far beyond that of a legislative type. Education today is becoming highly professionalized. To understand the principles of administration with all its details, requires several years of specialized training and experience. The board that does its work most efficiently limits its activities to providing the means of education in the form of teachers, buildings, libraries, and the like, and to the outlining of the broader policies of administration. It holds its expert executive, the superintendent, responsible for

the details of supervision and administration of the school system.

At the present time the most important problem of the school board is the development of an efficient system of financing the schools. On this important point the handbook says:

School Finance

How may the school board develop an efficient system of financing its schools? With the tremendous increase in enrollment in the schools of our country in recent years, with the gradual lengthening of the school year, and with a number of improvements in our school system in general, has come a marked increase in the amount of expenditure for educational purposes. The school systems in our larger cities from the standpoint of income and expenditure take on the characteristics of our larger industrial organizations. With the growth in the business side of our school systems it can readily be seen that the management of the finances of our schools along the lines of sound business practices becomes imperative.

The first essential in the financial management of a school system should be the preparation of the annual budget. The preparation of the budget should be done by the superintendent, after which it should be submitted to the board for its approval. The budget should be quite detailed, containing every contemplated expenditure as far as possible, and furthermore, it should be carefully followed to avoid any danger of exceeding the appropriations.

The school board should know definitely the taxing resources of the district, otherwise it is difficult to make any sound plans for future expansion of the system as necessity demands. Since the chief source of revenue of city schools is the general property tax, it is important that the board know the valuation of the district, how that valuation compares with the true valuation, what the legal tax limit is, what the tax rate for school purposes is, and how it compares with the rate in neighboring cities and communities. By having possession of these facts the board will be in a position to know whether its annual levies are excessive or not. In addition to the general property tax, the school dis-

trict has several other sources of revenue. Among these are: apportionments from county and state school funds, allotment from the Federal Government for vocational education as provided for by the Smith-Hughes and the Reed acts, incomes from bonds and loans, tuitions from nonresident pupils and various miscellaneous items.

As a general rule it is considered the best practice to operate the school system on a cash basis. This means that in order to avoid incurring any indebtedness the board must set aside a certain sum for a cumulative fund that will provide for any replacement of building or future expansion in the form of sites, buildings, etc. However, such practice conflicts with the law in some states and in other cases may be impractical for other reasons. To provide funds for unusual expenditures in such cases, it is advisable to raise the needed funds through the issuance of bonds. Two types of bonds may be issued: the first type is short-term serial bonds to be retired at regular intervals; the second type is the long-term bond with which a sinking fund is created for the purpose of retiring the bonds when due.

In order that the board and its superintendent may easily ascertain the financial condition of the district at any and all times, and in order to insure the wise and economical expenditure of the funds of the district, a standard system of accounting should be adopted. The type of accounting system will vary with the size of the district; but in any case it should be sufficiently complete to provide for an accessible and systematic record of every transaction. Many schools authorize an annual audit by a certified accountant.

In handling the funds of the district the board should practice reasonable economy. Not a cent of the district's money should be spent that does not directly or indirectly add to the educational facilities for the children. However, the board should distinguish carefully between "wise" and "unwise" economy. It is difficult to justify an unnecessary economy that seriously reduces the efficiency of the school system. For instance, it would hardly be considered sound economy to employ the best of teachers and through a measure of economy fail to pro-

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vide them with the necessary supplies and equipment for doing effective work. Likewise, it would be unsound business practice to erect expensive school buildings and fail to provide funds for the proper upkeep of those buildings.

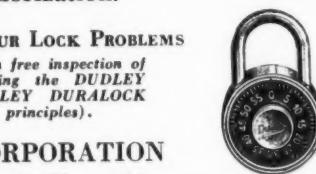
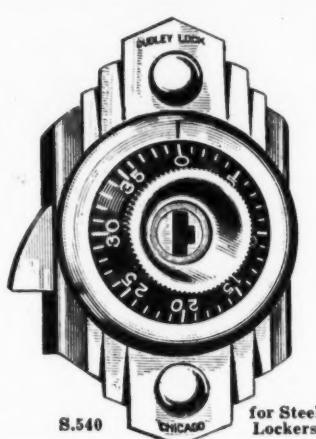
THE STATUS OF KENTUCKY BOARDS OF EDUCATION

(Concluded from Page 23)

Summary

The city school boards meet annually a median number of 12.7 times, county school boards meet annually a median number of 15.0 times, and independent graded school boards meet annually a median number of 12.6 times. The city school boards spend in such board meeting a median number of 2.5 hours, county school-board members spend a median number of 4.6 hours, and independent graded school-board members spend a median number of 2.3 hours. The city school-board members serve as a board member a median of 7.3 years, county school-board members serve a median number of 5.3 years and independent graded school-board members serve a median number of 4.7 years. The city school-board members devote a median number of 20.8 hours annually to school duties not including board meetings, county school-board members devote a median number of 35.4 hours annually, and independent graded school-board members devote a median number of 17.2 hours annually.

Women as school-board members have not met with popular approval. The majority of board members have as their principal community activity the church. Farmers, merchants, doctors, and bankers dominate the school boards of the state. School-board members of the rural sections usually have children in school, while serving as board members. School-board members are usually members of some church. The median age of the city school-



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visited my own particular kitchens a great many times. Really, I'm surprised to see how much time I can give to this, although I am a busy school executive! Well, fellows, that's the end of the story.

One of the four at table spoke: "On the level, gentlemen, he meant every last doggoned one of us!"

And among the empty tables we filed out to the checkroom.

THE TREATMENT OF SCHOOL- HOUSE FLOORS

(Concluded from Page 42)

Cement-floor filler should never be heated directly over a fire or flame, and cloths or mops used in applying it should be burned daily.

After the material is heated, pour it into a wringer pail. Then place a linen cloth, or any cloth that is free from lint, in a mopstick. Immerse the mop in the wringer pail and partly wring out. Rub the material well into the surface of the floor and smooth out evenly with the mop. Allow no pools of the material to remain on the floor. The object of this process is to completely cover the surface with as thin a coat of material as possible.

If the surface of a cement floor is badly worn, it should be scrubbed as clean as possible with water and a good neutral soap, and allowed to dry thoroughly before applying the cement-floor filler. Such a floor should be given two applications. Be sure that the first application is dry before applying the second coat.

Since it is unnecessary to apply cement-floor filler to parts of the floor not used; the material need not be applied closer than within six inches of the baseboards or stationary objects. On stairways, the material should be applied only where there is evidence of constant wear. A straightedge should be used in order to cut straight, even lines on the floor around the baseboards, around stationary objects, and on stairways.

DOES HE MEAN ME?

(Concluded from Page 28)

in yours—and I ask for your co-operation and sympathetic aid."

Sherm and I walked two or three blocks in silence toward the railroad station before he spoke.

"Gosh! At first I was afraid he didn't mean me, and now I am afraid he does! What do you think?"

But I was past thinking. I could only remember what my wife had once said: "When I want to know what's going on in my kitchen, what food we need, I don't ask the maid; I go out there myself and I find out for myself."

Since that meeting I want to tell you I have

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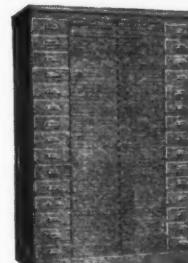
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Tool and Board Case
No. L-2072

A treated floor should not be used for 48 hours after application of the material. After 48 hours, mop the floor with clear, cold water to prevent tracking.

Cleaning Filled Cement Floors

To clean a filled cement floor, a neutral soap only should be used in the scrubbing water, since a powerful solvent will have a tendency to neutralize the filler.

Treatment and Care of Terrazzo Floors

Terrazzo floors are cement floors into the surface of which marble chips have been troweled and then polished.

After a terrazzo floor is laid, it should be allowed to dry about a week, and then cleaned by washing with clear water. A cement-floor hardener should then be applied, but not to the baseboard. This material hardens and prolongs the life of the cement between the pieces of marble in the terrazzo floor.

When cleaning a terrazzo floor, avoid the use of any powerful cleaning material in the scrubbing water, as the marble chips are easily discolored. Only a neutral soap should be used. Terrazzo floors are swept with a brush or a hall mop. A hall mop is preferred. Terrazzo floors should be frequently washed and thoroughly rinsed in order to keep them presentable.

Asphalt, Rubber, Mastic, and Composition Floors

The treatment and maintenance of asphalt, rubber, mastic, and composition floors have given and are giving school administrators much concern, in spite of the many "guaranteed" products for their care and preservation constantly brought to their attention. The reaction of many of these treatment materials has softened or gummed, and in many instances completely disintegrated so many floors of asphaltic and mastic composition, that, frankly, many who are responsible for the condition of these floors and have exchanged confidences regarding

them, are afraid to use any of the patented or specially compounded cleaning and preserving materials on them. As a result, the only treatment given these types of floors in many schoolhouses is to wash them with water to which is added a very small amount of a neutral soap. The natural, dark color of these floors "covers a multitude of sins." When closely examined they are not really clean. The most advisable procedure to follow with respect to them is to use the treatment advocated and recommended by the respective manufacturers.

SCHOOL-BUILDING ECONOMIES
IN ENGLAND

(Concluded from Page 36)

greatest savings. If, however, the structure is strengthened by steel stanchions, tied together where required by steel joists, the whole or part of the ground floor can be covered by an upper story, if and when the occasion demands. Such buildings, whether of one or two stories, are quickly erected, and are adaptable to advances in educational ideas, and even if they have to make way for new buildings before their useful life is run do not involve a large sacrifice of capital expenditure.

"It is true that the timber building has disadvantages, such as liabilities to fire, or to dry-rot, both of which must be guarded against. There is also the question of expenditure on maintenance. This has probably been exaggerated in the past; for the first ten years of their life, timber-framed buildings, if well constructed, should not require any substantial expenditure on maintenance beyond minor repairs, preservatives, and painting, and from information acquired about such structures as have now stood for many years in different parts of the country, it does not appear that the cost of upkeep has been unduly heavy.

"In special circumstances, as in mining districts, where owing to mining operations, there is no site available upon which a building of the ordinary type can be safely erected, or in areas with a moving or changing child population, e.g., on housing estates, the light timber-framed school is especially applicable. Rooms for practical instruction, physical education, or canteens may often be wisely erected on these lines.

"As compared with a building of the ordinary type, the timber-framed school shows the greatest saving

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when it is so well constructed and finished that it may be eligible for a period of not less than 25 years within which to repay the loan. Instances of such schools costing little more than half of the amount of brick-built schools have come to the Board's notice, and in terms of loan charges, reckoning interest and sinking fund at 25 years for timber and 50 years for brick, the annual charges for the former are considerably less initially, while the ultimate comparative cost of the two show a very substantial saving in favor of timber.

"The board is open to consider alternative methods of construction other than timber-framing, e.g., light steelframed structures, either combined with timber or with some form of subfilling.

"The Board has frequently been asked to state what it regards as a fair standard cost per head for school building. This has always been difficult to determine. They have, however, been willing to allow authorities a measure of freedom for experimenting with different types of plan and services. None the less, it is felt that after making such allowances there are too frequently such differences in cost as cannot be justified on the accommodation provided.

"The Board is able to cite a number of recently erected elementary schools, in which present-day standards of accommodation have been fully satisfied, where the cubic contents of the building have not exceeded 800 cu. ft. per head for senior, and 530 cu. ft. per head for junior children. They have noticed, too, numerous examples in the past few years of soundly constructed and well-finished brick-built elementary schools which have been provided at a rate of 10d. per cubic foot and even less. It appears, therefore, that on the average site, making allowances for the cost of works on the site outside the building, no difficulty has been experienced in building new schools of separate departments for infants, juniors, and seniors at a cost not exceeding £33 per head, though the cost per head for seniors has naturally been higher than that for juniors and infants, because of the extra space required for practical instruction and the smaller classes. Where full use has been made of the methods of economy suggested in this memorandum, the cost per head has been reduced to £30. In present circumstances, therefore, the Board would have great difficulty in approving any proposals or plans for such schools involving a higher expenditure, unless it can be shown that really exceptional difficulties exist, or unless building costs increase.

"Where timber-framed buildings have been used it has been shown that reductions of about 25 per cent of the lower of the above figures have been made."

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EDUCATIONAL NEEDS CONSIDERED FOREMOST IN THIS BUILDING

(Concluded from Page 38)

somewhat larger and in the installation of special cabinets, closets, and plumbing equipment, to provide for such subjects.

The Larger Units

The library-cafeteria unit (now used as a cafeteria) includes a main room 23 by 53 ft.,

a librarian's room, a kitchen, a fanroom, a supply room, and an employees' restroom. All serving is done in a passage adjacent to the kitchen and the library may be completely shut off from all other parts of the school.

The kindergarten unit was planned to serve as a small assembly and meeting place for neighborhood groups until conditions warrant the construction of an auditorium. It contains an assembly room 29 by 32 ft., wardrobes, toilets, two group rooms, and a kitchen. The main room has a beamed ceiling 15 ft. high. The

kindergarten unit has its own terrace and a separate, fenced playground.

The administration unit, which is located on the first story at the front of the building, includes an office, a secretary's room, with vault and supply closet, a principal's office, a counsellor's office, a clinic and waiting room, a girls' restroom, a teachers' restroom, with locker alcove and kitchenette, and a textbook and supply room. A hall opening from the public office gives access to all rooms, except the restrooms.

The building occupies an area approximately 85 by 200 ft., and contains 530,000 cubic feet of space. It provides accommodations for approximately 700 pupils in a conventional elementary school. It was erected at a cost of 21 cents per cubic foot or \$160 per pupil.

In the planning of the interior, the architect endeavored, through the selection of detail and color scheme, to create a homelike atmosphere and to minimize the impression of severity so often felt in such buildings. Areas of esthetic interest have been created in critical locations to give brightness, cheerfulness, and interest to the building. Its functions are expressed in honest materials and the building should render many years of useful service to the community and to those who pass within its walls.

HYGIENE AND SANITATION

Springfield, Ill. The school board has established a department of health service, with Dr. Gottfried Koehler as organizer and director of the work. It is the purpose to develop a co-operative health program with the aid of the medical and dental associations and the city health department.

Under the direction of the school officials of Valparaiso, Ind., the various groups of the parent-teacher associations co-operated in a community canning project in order to supplement the materials for school lunches during the school year. The project culminated in the canning of more than two thousand quarts of fruits and vegetables, which will be used in feeding needy school children at the different lunchrooms.



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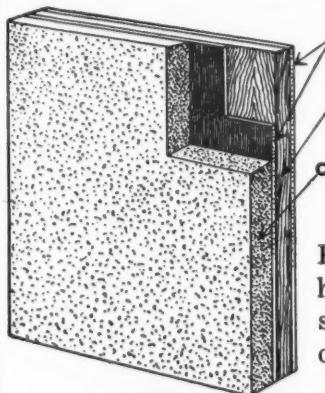
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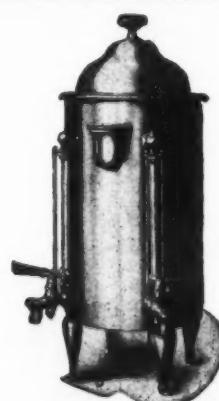
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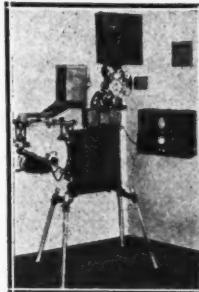
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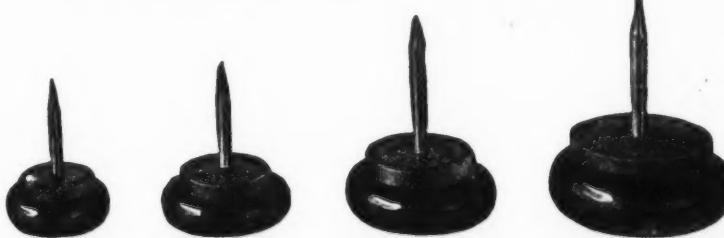
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After the Meeting

CURIOSITIES OF THE SCHOOL REGISTER

A man who first asked the question, "What is in a name?" apparently was not a schoolmaster and did not have a teacher's contact with some of the curiosities in pupils' names. A recent issue of *The Teacher's World* (London), contained an amusing collection of letters from various teachers, in which there are curious combinations in names.

Thus a teacher with a strong feeling for history found in her class a York, a Lancaster, a Chester, and an Essex.

Another teacher, in a rural community, had a class in which there was a Walter Adam, a James Eve, and a Philip Eden. In another class in the same school there were three birds: Thomas Dove, James Pidgeon, William Crow. This same school had a class with strong religious names: James Priest, Walter Dean, William Bishop, William Pope.

A teacher who worked in a country school had on her register Daisy Wheel and Richard Barrow. Oddly enough Daisy's father was a gardener and Richard's father the coachman at a large neighboring estate.

The headmistress in one school noted a bucolic collection, including a little girl named Piggs, another named Bullock, a boy named Drake, and a lad named Henman.

Probably the teacher who had the most interesting collection of names was one in a suburb of Nottingham. Her register showed a Knight, a Rose, a Leaf, a Raven, a Martin, a Keys, a Leivers, a Whitehead, and a Brown.

No String on His Finger

Waiter: "Haven't you forgotten something, sir?"
Professor: "Why, I thought I gave you the customary tip."

Waiter: "You did, sir, but you forgot to eat." — Humorist.

Learning From Granny

A certain grandson of Queen Victoria, when a freshman at Oxford, had spent all of his allowance and, what is worse, gone ten pounds in debt.

He appealed to his royal grandmother, asking her for an advance on future remittances. He didn't get it. Instead, he received a lengthy letter from that austere lady containing some reproof and much, much advice.

In due course the young man replied to this. He had, he said, decided to heed everything his grandmother had to say about conservatism and thrift and had, in fact, already begun by selling the original of her letter to a collector for twenty-five pounds. — *New York Telegraph*.

Getting Ready for the Exam

"Well," said the professor, "I believe that's all. And now are there any questions before the final examination?"

There came a voice from the back row:
"What's the name of the textbook in this course?"

Schoolday Reminder

He: "That driver ahead must be Miss Fiditch, my old school teacher."

She: "Why?"

He: "She seems to be so reluctant about letting me pass."



What a Break

"Did you have measles worse than Bobby Jones?"
"Much worse, grandma. I had 'em during school vacation." — Tid-Bits.

JUMPING WHERE?

Supt. John Lindsey, of Mitchell, S. Dak., argues that superintendents should not waste time in indecision after they have once come to the conclusion that a given course of action is necessary. Too many, he says, remind him of a certain cowboy:

"This cowboy had ridden into town in the rain with his leather trousers, which became considerably kinked at the knees. That night he took them off and they dried in that condition. The next morning he put them on again and went out on the town's only street and stood on the edge of the sidewalk. A man working near him watched him for quite a while. Finally, the workman's curiosity got the better of him. Walking up to the cowboy, he said, 'Stranger, if you are going to jump, for Pete's sake jump.'

Not a Member

Dr. W. S. Deffenbaugh of the U. S. Office of Education owns a small power boat which he stores in the yacht basin on the Potomac River. Recently he was approached by a painter who desired to overhaul and repaint the boat.

"How much will you charge for the work?" asked Dr. Deffenbaugh.

"Nine dollars a day," demanded the painter.

"I would not pay Michelangelo nine dollars a day to paint that old tub," said the Doctor.

"Say," said the painter, "if Michelangelo does any boat for less than nine dollars a day, he ain't a union man."

Adult Education?

Johnson: "The Smiths are taking German lessons. Why the sudden interest?"

Mrs. Johnson: "That's simple. They have just adopted a German baby, and they're getting ready to understand it when it begins to talk."

They Both Knew?

"I see, Miss, that you have spelled 'receive' with 'ei' in one place and 'ie' in another."

"I'm sorry, sir. That was a slip. Which one shall I correct?"

"M'm—er, why, the one that's wrong, of course."

The Psychologist Questioned

Suspected of being mentally deficient, a schoolboy was asked by a psychologist:

"How many ears has a cat?"

"Two," the lad replied instantly.

"And how many eyes has a cat?"

"Two."

"And how many legs has a cat?"

The boy looked at him, suspiciously.

"Say," he inquired, "didn't you ever see a cat?"

Triumph of Education

Young man desires work of any kind. High-school graduate and 12 years college. Can drive any make car or truck. — Mt. Carmel (Pa.) paper.

These Boys Knew?

First student: "Great Scott! I've forgotten who wrote *Ivanhoe*."

Second ditto: "I'll tell you if you tell me who the Dickens wrote the *Tale of Two Cities*!"

When the Geography Teacher "Does" Europe
"Traveled all over Europe, eh? Went up the Rhine, I suppose?"

"Climbed it to the top."

"Saw the Lion of St. Mark?"

"Fed it."

"And visited the Black Sea?"

"Filled my fountain pen there."

STYLES CHANGE

Mary had a little bit

Of bob behind her head;

The style was good, and what was left

Of Mary's hair was red.

Alas, one day the girls at school

Declared this fad they'd check;

And now our Mary's wearing bangs

A-dangling down her neck.

—Orville Jones

Buyers' News

Story of Paper Making. The Kalamazoo Vegetable Parchment Company, Kalamazoo, Mich., has issued an interesting technical bulletin, entitled *The History and Story of Paper Making*, which gives an insight into the industrial romance of the paper-making trade, showing the methods of the paper-making process, and some of the results of laboratory studies.

The story opens with a history of the earliest times, shows the materials from which paper is made, how rags are used in the making of paper, how wood pulp is prepared in clipping and digesting machines, how the fibers are prepared for paper making, how the paper

is smoothed in the calendering and rewinding machines, and finally how paper is ruled for various kinds of paper, including commercial and school papers, and fine bond papers.

School officials who are interested may obtain a copy of the pamphlet by writing to the company at Kalamazoo, Mich.

New RCA Centralized Radio System. The RCA Victor Company, Inc., Camden, N. J., has issued a new technical bulletin and descriptive specifications on the construction, operation, and advantages of the new RCA centralized radio system.

In order to meet various practical applications, two basic RCA systems have been devised, each utilizing a different principle and having its major application in school or public building under conditions insuring adequate antenna and ground facilities.

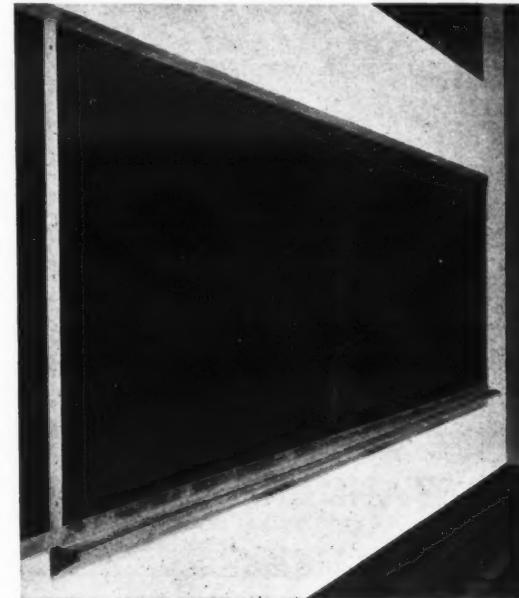
The AF, or audio frequency system is designed to operate any number of sound reproducers, while the RF, or radio frequency system consists of a single receiving antenna with appropriate associate equipment located at the base or lead in the antenna itself. These two systems, with their many flexible applications, offer a solution to practically any problem of electrical sound control, reproduction, and distribution. A complete complement of loud-speakers for flush or external wall mounting, together with extension-control units of various types, is available upon demand.

Complete information and prices may be obtained by any school official upon request.

Albert Pick Reorganizes. Announcement has been made of the reorganization of the Albert Pick Company and of its various subsidiaries, which have been taken over by the newly formed Albert Pick Corporation. The subsidiary, Albert Pick, Inc., will continue the operation of the hotel and restaurant equipment and supply business.

The business of both companies will be administered by a newly formed board of officers and directors, composed of the following: President, I. S. Anoff, Chicago; vice-presidents, W. P. Dunn, Jr., Chicago; Henry Getz, David Goldman; secretary, Max Swiron; assistant secretary, R. E. Klinge; treasurer, Maurice Rothschild. The new firm is supplied with ample capital and is equipped with an efficient business organization. The firm will maintain its general offices and salesrooms at 1200 West Thirty-fifth St., Chicago.

The New Chalk Rail. The Aluminum Company of America has recently placed on the market an entirely new line of fittings for mounting school blackboards in classrooms. Border spaces for use at the tops, bottoms, and sides of blackboards, as well as a valuable



THE NEW ALUMINUM COMPANY CHALK RAIL

new type of sanitary chalk rail, are manufactured and may be obtained in any desired lengths. The aluminum blackboard fittings are guaranteed for the lifetime of the blackboards and require absolutely no finishing or especial care. The simple design eliminates dusting to a minimum.

Kewaunee Buys Scientific Equipment Company. The Kewaunee Mfg. Company, of Kewaunee, Wis., has recently purchased the good will of the Scientific Equipment Company formerly of New York City, for many years the exclusive Kewaunee distributors for the Atlantic Coast and New England territory.

The Kewaunee office has been removed to the News Building, 220 East 42nd St., New York City, where both are operated as the Eastern Branch Office of the Kewaunee Company.

With few exceptions all of the sales personnel of the Scientific Company organization will continue with the Kewaunee Company and the firm will render the same prompt service as in the past.

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valuable contribution to
the literature of modern
school architecture » » »**

A Method of Procedure and Checking Schedule for Planning School Buildings and their Equipment

By John J. Donovan

Here is a checking schedule for elementary, junior, and senior high school buildings, so arranged that it is practically impossible for a school superintendent or a school architect to omit any detail of a school building. It is a book of more than 350 ruled pages, listing every possible item to be considered in the erection of school buildings. It includes an outline for various types of school organization, academic and industrial-arts classrooms, kindergartens, special rooms of all types, laboratories, gymnasiums, corridors, libraries, cafeterias, auditoriums, etc. Only an examination of the book can demonstrate the service it offers any one interested in the construction of schools.

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Acousti-Celotex ceilings can be painted repeatedly with any kind of paint without loss of sound absorbing efficiency—BECAUSE: the deep perforations cause sound to be absorbed *within the material* instead of at the surface.

It is this property (covered by exclusive Acousti-Celotex patents) that justifies the claim, for this material, of PERMANENCE.

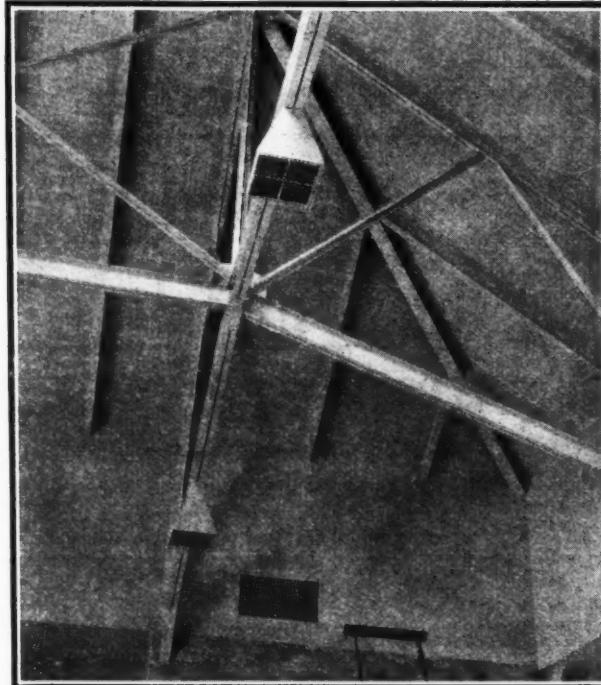
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The high sound absorbing efficiency of Acousti-Celotex, predetermined and fixed by its patented perforations, produces quiet, corrects bad acoustics and provides the conditions necessary for the best work of both pupil and teacher.

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Kalite Sound Absorbing Plaster



● **DETAIL OF THE CEILING** of the Gymnasium, Indoor Athletic Building, Harvard University, showing application of Acousti-Celotex to absorb the sounds arising in this otherwise noisy department. Architects: Coolidge, Shepley, Bulfinch & Abbott, Boston, Mass.



● **IT'S NOT TOO LATE** to quiet noisy schoolrooms—you can apply Acousti-Celotex NOW—no need to wait for vacation periods for this simple improvement—no occasion to wait for new buildings. Concentration was made easier for students in the library of Oliver Hazard Perry Junior High School, Providence, R. I.—teachers were relieved from the irritating handicap of noise—by the use of Acousti-Celotex. Architects: Architectural Dept., City of Providence.

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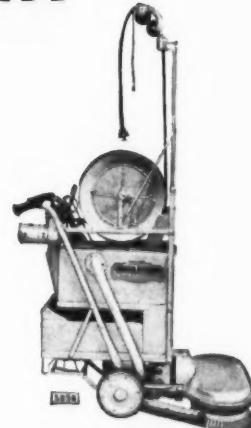
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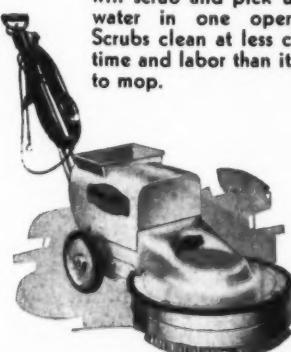
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Some of the *Finnell* products are shown here. To the left are listed some of the waxes, soaps and other materials which have been used in the school field for more than a quarter of a century. To the right are some of the *Finnell* machines which are used so successfully in schools throughout the nation.

You need this information. Without cost or obligation, we shall be glad to have one of our skilled men make a survey of your floors. He can tell you how to keep your floors clean, sanitary and attractive, doubtlessly for less money than you now spend for floor maintenance. Write today. **FINNELL SYSTEM, INC.**, 810 East Street, Elkhart, Indiana.



No. 90 Scrubber-Absorber. This remarkable machine will scrub and pick up the water in one operation. Scrubs clean at less cost in time and labor than it takes to mop.



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Finnell Mop Truck. Carries clean water and tank for dirty water. Keeps mop clean. Saves carrying pails.

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An AUSTRAL Multi-Unit WARDROBE as installed in Schools Nos. 3 and 5, Cedarhurst, L. I., L. J. Lincoln, Architect. Note on the left the combination storage and teacher's closet; center, the accommodations for 40 pupils; right, the univent with the exhaust grill directly above it. Note the economical use of the entire rear of the classroom.

The Architect, L. J. Lincoln, says: "The wardrobes installed in the Cedarhurst Schools are entirely satisfactory and have received much favorable comment from both teachers and interested visitors. They are strong, well made and carefully erected. I do not hesitate to recommend them to anyone who may be interested. The advantages of this equipment will be quickly recognized by those who appreciate the requirements of the better type wardrobe."

The Contractors, John V. Schaefer Construction Co., say: "We wish to thank you for the excellent service you have given us in installing Austral Wardrobes in Cedarhurst Schools Nos. 3 and 5. In our opinion, this is one of the finest wardrobes on the market today, and its slightly higher cost is fully justified by the substantial quality of the hardware and woodwork. You will undoubtedly be pleased to know that the Architect, Board of Education and Teachers are as well pleased as ourselves."

Charles S. Wright, Supt. of Schools, says: "The Austral wardrobes, installed in our buildings, operate quietly and efficiently; they are constructed of splendid material, both as to hardware and woodwork; they are designed to harmonize with the other features of the rooms; there is no shrinkage or warping of panels and, in my judgment, the general mechanism is superior to that of any other wardrobe with which I have had experience."

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